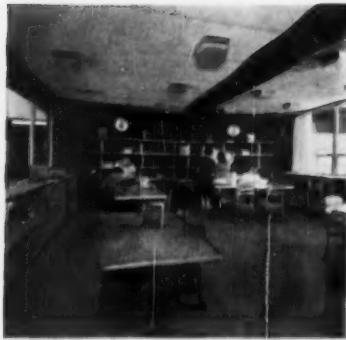


THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

THE *Nation's Schools*

NOVEMBER



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Schools Can Plan for Disaster Service

Don't Let the N.D.E.A. Unbalance the Curriculum

What Can We Do for the 'Trainables'?

Legal Principles Govern Employment of Architects

Let's Reexamine the Freedom To Teach

COMPLETE CONTENTS ON PAGES 3 AND 4

THREE VIEWS of Salina Elementary School in Saginaw, Michigan. It's the story of how little improvements make a better school (page 82).



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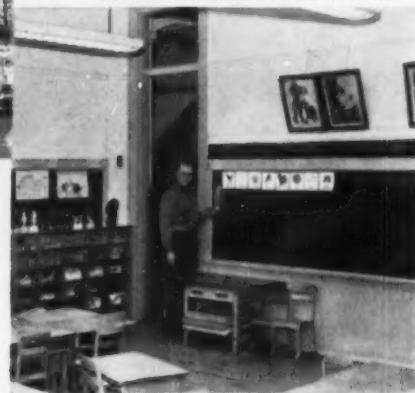
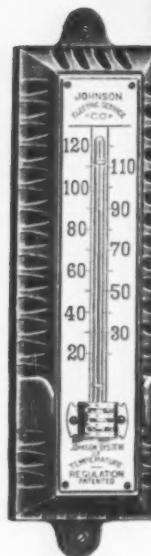
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George W. Morris School, Louisville, Kentucky. Built in 1852, it still functions efficiently thanks to good maintenance and wise selection of original materials and equipment.



Howard Smith, Heating Shop Supervisor, Louisville Board of Education, inspects a Johnson thermostat installed in 1890.



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1960 : still going strong—70 years later!

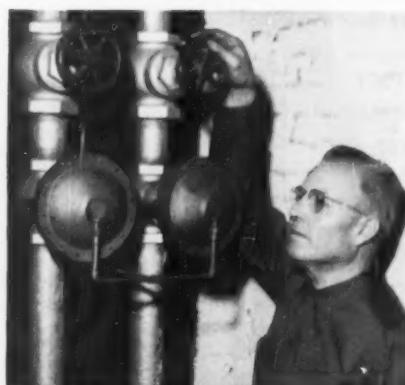
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THE Nation's Schools

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

NOVEMBER 1960

Schools Can Plan for Disaster Service 66

School buildings, because of their resources and facilities, are "naturals" as temporary shelters for large groups of people when a natural disaster strikes a community. It is the administrator who can make advance plans with the local Red Cross and the local government for converting school facilities.

Dorothy L. Bovee
and
John E. Hogan

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Parental pressure on the public schools to provide classes for the severely mentally retarded is understandable, but such schooling would be only a partial solution. This psychologist-educator has a much broader, cradle-to-grave plan, more expensive in the beginning but eventually less expensive.

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Interviewed by
Mildred Whitcomb

Federal Aid: Don't Let It Unbalance the Curriculum 76

Part 2 of a series: A superintendents round table holds that the National Defense Education Act emphasizes aid to science, mathematics and modern foreign languages at the expense of other courses in the curriculum. Most of the superintendents would oppose the N.D.E.A. as a permanent program.

Calvin Grieder

Legal Principles Govern Employment of Architects 90

Beginning a new series: School law researchers discuss guides for avoiding legal difficulties in such matters as the authority of a school board to hire an architect, the legality of an oral contract, and the responsibilities of both the board and the architect in a contract.

Lee O. Garber
and
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Out-of-School Activities May Not Measure Teacher Competence 97

How much importance should an administrator place on out-of-school activities in measuring teacher competence? A research study, conducted by the authors, shows that many teacher out-of-school activities are not related to either of two criteria of teaching effectiveness that were used in the study.

James W. Popham
and
Lloyd Scott Standee

Vol. 66 No. 5

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The Little Things That Make a Better School 82 R. E. Wilson

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SCHOOL LUNCH

Plan Kitchen Facilities To 'Fit' Employe 102 Mary deGarmo Bryan

Two surveys reveal that the average school lunch employe is a widow, past 50, short and heavy. Her age and physical characteristics should be considered carefully when equipping school kitchens and lunchrooms.

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READER OPINION

Another Alternative in Determining Teacher Salaries

Although I have served for the last nine years as a superintendent and have been involved annually in determining teacher salaries, I have never felt that I was nor should be in any of the positions mentioned by Dr. Rogers in last January's issue of *The NATION'S SCHOOLS* ("The Superintendent Is the Man-in-the-Middle"). To state that the superintendent has but three alternatives regarding teacher salaries seems an oversimplification of the problem and ignores completely another and more important alternative.

Setting teacher salaries is an arbitrary, if not perfunctory, affair in most school districts. Teachers, if they go this far, usually select a salary committee that may spend much time in gathering facts and preparing arguments to justify the proposed increase. With some diffidence, the chairman obtains permission from the board for the committee to present its story. This usually takes place at a board meeting with the committee being given perhaps as much as a half hour to present its case. At the conclusion, the board chairman states that the board will take the request under advisement and come to a decision later. The decision is rendered in due time after being discussed in an executive session. There is no appeal.

In this procedure the superintendent may use his influence on behalf of the board or the teachers or he may remain neutral. If he follows any of these alternatives, he is failing in his chief responsibility — to utilize every resource for providing quality education.

Teacher salaries are inextricably associated with quality. It may not seem so in some districts; in many cases there are superior teachers employed at substandard salaries. Quite often, districts do attract and employ superior teachers even though salaries are low. But eventually, salaries at low levels fail to attract a capable teacher or the district loses a superior teacher, resulting in a decline of the quality of education.

Knowing this, the superintendent has the inescapable responsibility for bringing his board to a desirable attitude toward the setting of teacher salaries. Essentially, it is an attitude embodying the concept that this important process is a co-equal responsibility, falling on both the board and the members of the professional staff, including the superintendent. Together the board and staff should determine the elements that should underlie the establishment of salaries. Together they should develop criteria to serve as the bases of judgment. Together they should explore the resources of the

school community to determine the limits of expenditure for this purpose.

The mechanics for doing this may vary but, as a principle, the procedure should be part of written board policy, and specific times should be designated for meetings — as often as is necessary to accomplish the purpose.

In this procedure, the superintendent is neither for nor against the board or the teachers. Instead he serves as a cohesive force and exerts his leadership with both groups in seeking the salary level that will make the most effective contribution to the improvement of quality in the school's program. — MARION DONALDSON, *superintendent, amphitheater public schools, Tucson, Ariz.*

Extracurricular Activities Can Supplement Academic Program

The place of extracurricular activities in the school program once appeared settled. The Space Age brought a shift in emphasis. The cry now goes up for more science, mathematics and foreign languages. In the background, a fainter cry calls for more English and social studies, including history. The stage is ready for a march of the major disciplines. Why, therefore, should all of this disturb the previously settled condition of the extracurricular activities?

Major emphasis on the fundamental disciplines has brought equal emphasis on the high quality of achievement. And this requires time. It has been said that extracurricular activities disturb classroom work, require time for preparation and participation, and therefore decrease the time and efforts of the student for a full pursuit of the major disciplines.

In Virginia, the problem is of general concern. The state board of education has taken official notice of it and, in brief, has resolved "that extracurricular activities should supplement the regular classroom program." It has further resolved that division superintendents and local school boards should review these activities periodically, assess them, and project only those that serve the desired purpose.

The Governor's Commission discovered that a grand total of 210 such activities were either recognized or conducted in the Virginia public schools, and now a commission on public education is studying this along with other areas of public school functions. Some think that the extracurricular tail is wagging the curricular dog.

To abolish extracurricular activities would probably be more objectionable than having too many. A better solution is indicated.

The 210 separate clubs, organizations and associations listed in Virginia, (Continued on Page 10)



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Reader Opinion

(Continued From Page 6)

and this is generally applicable to the other states, may be divided into two classes: classroom connected activities and school connected activities. Latin, history, science, mathematics and English clubs, for example, are classroom connected; athletics and the yearbooks are school connected.

The classroom connected extracurricular activities should supplement a regular classroom program. Both are parts of a unified whole and should take place wholly or for the most part

during the regular scheduled classroom period.

School connected activities, commonly called extracurricular, more directly affect the school as a whole. Interwoven with the total fiber of the school, they recognize no demarcation lines. In most instances, these may be scheduled on nonschool time. Football may be practiced in the afternoon after school is dismissed, and interscholastic games may be played on Friday evenings or Saturday mornings.

If school connected activities are scheduled on nonschool time and if classroom extension activities are sched-

uled during the regular scheduled class period, the current objections to extracurricular activities will be removed.

These concepts are far from self-executory. They require the participation of teachers, parents, pupils, principals, superintendents and local school boards. Each one should understand the whole program and do his part. The anticipated outcome is a stronger school, a better trained pupil, and a more satisfied public. — TYLER FULCHER, *division superintendent, Amherst County public schools, Amherst, Va.*

Get Tough. Teachers have had to take altogether too much nonsense from unruly children, according to William C. Morse, professor of educational psychology, University of Michigan.

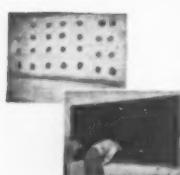
"We need to have as much investment in how to control children as we have in how to understand them . . . There's been a tough battle to train teachers to accept certain kinds of behavior that probably should not be tolerated," he maintains. The psychologist said that teachers are told to "accept" the child, to love and understand him, and to "relate" to him, no matter what the situation. But, he adds: "Our acceptance may mean keeping him in school or having him removed for special help. Teachers will accept him by doing what is necessary to help the child — and this may mean restricting him."

Double Delicious. A program to match and in some cases double the contributions made by employees of the Ford Motor Company to colleges, universities and secondary schools has been announced by Henry Ford II. Under the program, the company will match an employee's gifts to institutions of higher education dollar for dollar to a maximum of \$5000 in any one calendar year. If any of the contributions are made to private colleges or universities, the company will donate an additional dollar for each employee dollar for the first \$1000 so contributed. The company also will donate up to \$6000 to match an employee's gifts to secondary schools on the same basis.

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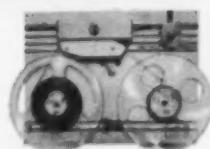
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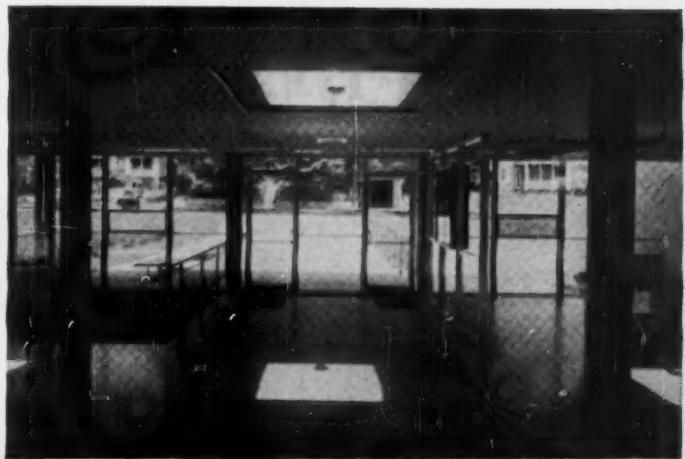
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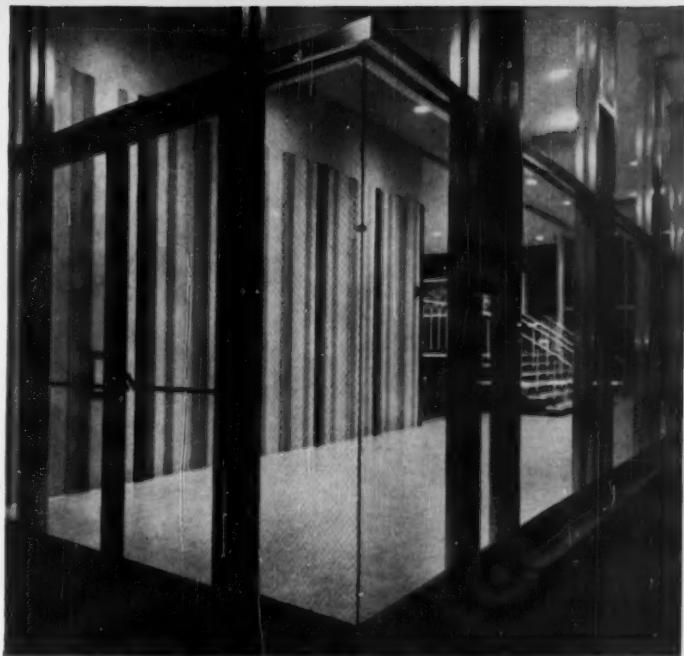


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Combining beauty, utility, and economy, Mississippi leads the way by making available an extensive selection of translucent glass patterns that do wonderful things with daylight. In addition, rugged Mississippi Wire Glass, whether for obscurity or clear vision, affords effective but inconspicuous fire protection while enhancing the appearance of any school... when installed in partitions, skylights, stairwells, windows, doors, or wherever else fire and breakage protection is required. The versatility of Mississippi glass provides architects and engineers with a practical solution to virtually every daylighting problem, including safety with decoration, with heat absorption and with light diffusion and direction.

For details, see your nearby distributor of quality glass or write for latest catalog. Address Dept. 15.



Polished Misco Wire Glass glazed in main entrance of Hellertown High School, Hellertown, Pa. Architect—Heyl, Bond & Miller, Allentown, Pa. Contractor—Gottlieb-Schneider, Bethlehem, Pa. Glazing Contractor—Penn Allen Glass Company, Allentown, Pa.



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Even school-boys-in-a-hurry are no match for the Russwin 1750 door holder!

It's built like a girder! Solid brass . . . forged brass end brackets . . . cold-drawn, hard-temper brass arm. And a coiled spring "cushion" of heavy tempered

steel absorbs the shattering shocks kids give it.

You can't buy a better-built holder. Have your Russwin supplier show you the 1750. Or write for literature to Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.



Top-mounted slide rides free of dust, dirt. Quiet, smooth-working action.



Finger-tip lever for hold or non-hold functions. Easy-to-reach location.



Wide-contact latch. No appreciable wear after million-cycle test!



Cuts a real swath!

SIX FOOT TWO! That's a man-sized swath this 1960 Toro Sportsman* clips off with 2 gang units attached. Saves man-hours for you.

And this Toro's no toy. Under the rugged frame is a husky 30-inch reel unit with 6 tough blades on an oversize-diameter reel. Add two 25-inch gangs and you've got the full 74-inch swath for top efficiency.

There's power to spare in the mighty $5\frac{1}{2}$ hp, 4 cycle engine, too! Breezes up hills like they weren't even there.

Still, you haven't heard the best news: the Sportsman takes a 42-inch snow plow blade, or a 30-inch lawn roller, or a 2 x 5 foot dump cart—or even a 32-inch triple-blade rotary mower unit with the exclusive Toro "Wind Tunnel" design.

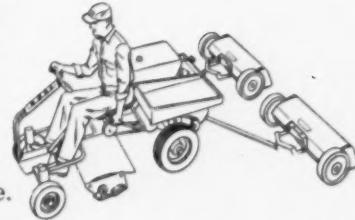
This Sportsman can save you time and money year around!

Like a demonstration on your own grounds? Simply call or write your nearby Toro distributor. He's listed in the classified section of the phone book under "Lawn Mowers."

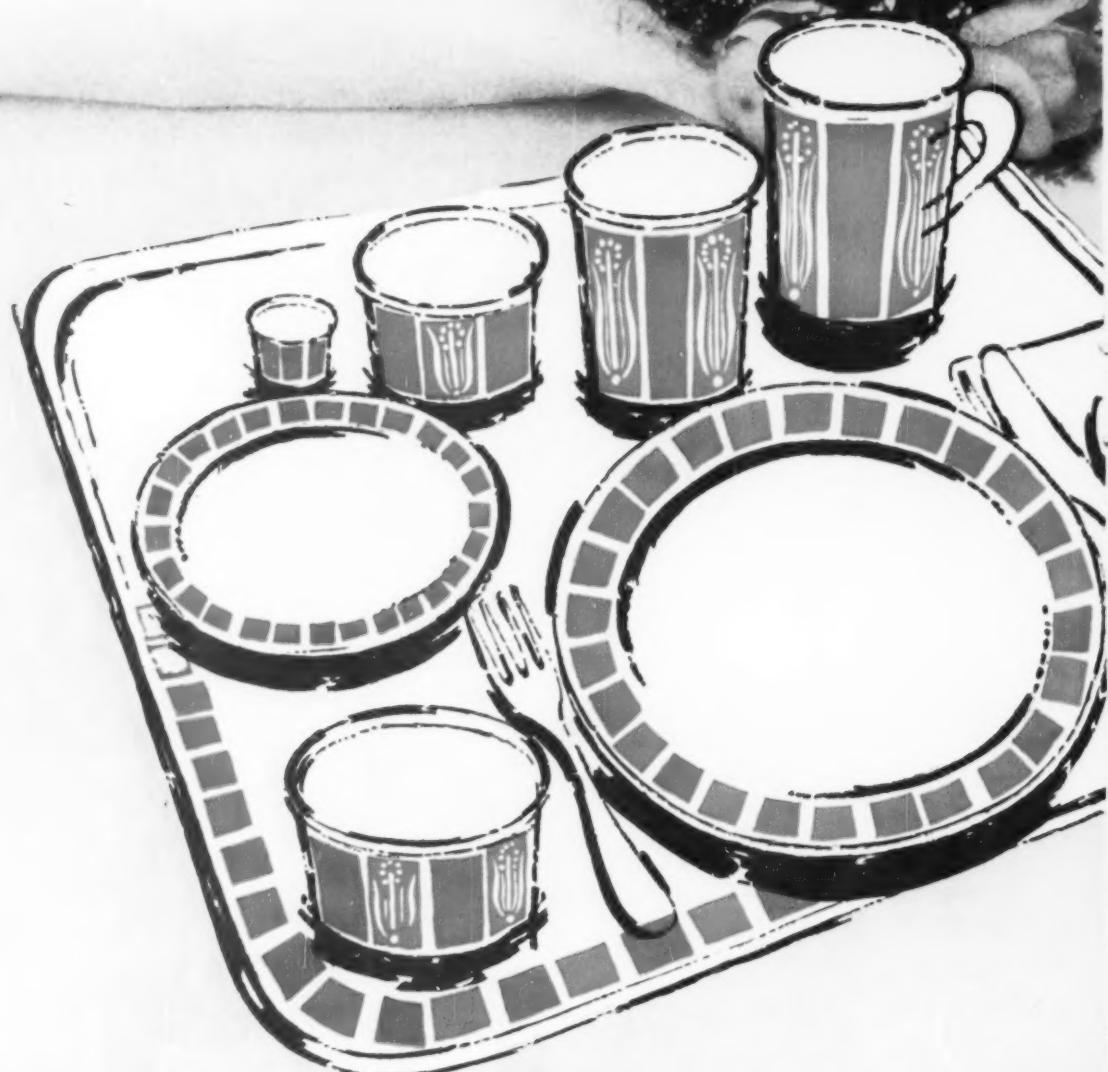
*A registered trademark of Toro Mfg. Corp.

TORO

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Announcing the cheerful new *Tulip* design



place setting



...THE MOST APPETIZING INNOVATION IN FOOD SERVICE FOR SCHOOLS IN YEARS! See it at the ASFAS Convention, Lily Booth 324. Tulip Design by Lily* combines the very new... the very beautiful... with the convenience and sanitation of disposable paper service.

Its beautiful design and striking color combination have been market researched across the country. It was found to be completely at home with all foods and beverages; harmonious with any décor, modern as well as traditional.

A distinctive departure from ordinary paper service, the creative design of the "Tulip" motif plays the fashion-keyed color combination of blue and green against pure bone white. The result—a bold, modern decoration with tremendous appeal; a new freshness... cleanliness in its every line.

You can expect welcome acceptance of this new place setting with everyone; a disposable service designed to highlight your food service program.

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Modern-minded educators realize what a great contribution a CONN Organ can make during school hours. But when classes are through, CONN music is just as much in demand...at dances, PTA meetings, gatherings of parents and guests at homecomings, and a host of other community affairs. Those who see and hear the CONN are always impressed by its fine organ craftsmanship and rich, pure tones. There is no "tone borrowing" with a CONN. Each note has a tone generator of its own. And CONN's versatility means accurate rendering of all kinds of popular and classical music. If you have any question about CONN quality, talk to your bandmaster. He'll tell you CONN has been the leader in band and orchestra instruments for 85 years...a background no other organ manufacturer can match. There is a CONN Organ for every budget, room size and range of musical expression needed. Don't buy any organ until you try this one... **CONN ORGAN**

Conn Organ Corporation • Elkhart, Indiana



permanently* economical Nucite glass chalkboards



Why the finest chalkboard costs less than so-called "economy" boards

Compare the cost of Nucite glass chalkboards against the cost of purchasing *two* "economy" composition boards—or against the cost of slate chalkboard *plus* several charges for resurfacing. That's what the *minimum* cost will be over the life of the building. You'll have to replace composition boards . . . you'll have to resurface slate. All you do to Nucite glass chalkboards is wash them.

In the time it takes a kindergarten student to reach high school, the cost picture will favor Nucite chalkboards—and they'll *still* have a maintenance-free lifetime to go. Installations twenty years old have the superior texture, color and legibility they started with. Nucite chalkboards just *can't* wear out.

They're difficult to damage, too. Nucite chalkboards resist chipping and withstand heavy impacts better than most other chalkboards. They're similar to porcelain panels used in curtain wall construction.

On top of long-range economy, Nucite boards deliver long-range legibility. They have the finest writing surface available. Five sight-engineered colors. Send for samples . . . or see Sweet's ^{23e} No. Agents and distributors in all principal cities. Write for the name of the one nearest you.

Nurite crayon boards do double duty as projection screen and light ivory background for multi-color

diagrams and drawings. Since pigmented chalk is likely to stain any chalkboard surface, Nurite boards and Ezy-Rase water soluble wax crayons were developed especially for classroom color work. A moist tissue or sponge erases markings completely. Identical framing, installation and appearance make Nurite boards the perfect companion to Nucite glass chalkboards. They're especially suitable for art and science classrooms which make heavy use of charts, diagrams and films. Ask your New York Silicate distributor about it. He'll also advise on Nucite glass, steel, Formica, Silicate composition or slate chalkboards, and on glass door or changeable letter bulletin boards—all made by New York Silicate.

* In more than 20 years and 25,000 installations, we have never been called upon to fulfill the following guarantee: the surface of Nucite glass chalkboards is guaranteed for the life of the building against fading, warpage, or becoming slick or shiny under normal classroom use. • Should any Nucite glass chalkboard break within 20 years after installation, outside of willful or accidental damage, it will be replaced free of charge.

NEW YORK
BOOK SLATE COMPANY, INC. **SILICATE**
600 Old Country Road
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Design a school



for active learning

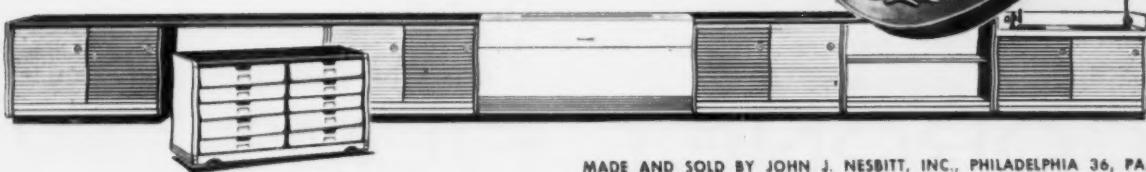
One investment in the Nesbitt 600 Line gives you the thermal comfort most conducive to learning plus the utility of flexible storage units—both important aids to creative teaching and pupil participation

*N*ew physical facilities for schools are major investments for 30 to 50 years. The comfort-conditioning units for individual classrooms are such an investment. So are the versatile storage cabinets that make for a flexible classroom. Combining both these requisites into one colorful window-wall ensemble is the sensible and economical idea originated and developed most adequately by Nesbitt. In choosing such equipment to serve your school for the next 40 or more years, it is wise to consider how well the supplier has served for the *past 40 years*. Nesbitt *future* service can be trusted to fulfill this policy instituted in 1917: Nesbitt responsibility only begins with the sale and continues for the life of the building. This is why you should see the new Nesbitt 600 Line.

Comfort and utility tailored to your needs

Nesbitt offers each classroom these tools for active learning: a Syncretizer heating, ventilating and natural-air cooling unit—or a Year-Round Syncretizer, which is equipped to incorporate mechanical cooling and dehumidification in warm weather; integrated Wind-o-line radiation—for extra protection if required; an integral full-length display board shell or work counter; and fixed or mobile, open or closed storage and utility cabinets—including adjustable and interchangeable shelves, cubicle dividers, racks and tote trays—and a stainless steel sink-bubbler unit . . . all available in a variety of modern basic and accent colors.

■ A longer school year is looming as an economic necessity. By early consideration of your building design, you may be able to incorporate year-round air conditioning within a normal budget. For valuable information, send for Publication SP-1060.



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Why are Coronet Films
invariably the choice
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concerned with film selection?

The skilled teacher—thoroughly familiar with the curriculum and highly sensitive to classroom needs—is constantly searching for supplementary materials to enrich each unit of instruction.

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Why do Coronet films have this instantly recognizable quality? . . . because for twenty years their production has been governed by a single aim: to make only those films which *truly correlate with the course of study and the textbooks which are used most widely.*

To become better acquainted with Coronet films for classroom use, simply select preview prints of your choice from the current catalogue of nearly 1,000 Coronet films. For detailed information on the extent to which Coronet films correlate with the curriculum, write for a handsome, new chart which outlines the exact relationship between more than 100 Coronet science films and 30 leading textbooks used widely in grades 4, 5, and 6. Ask for "Intermediate Science Chart."

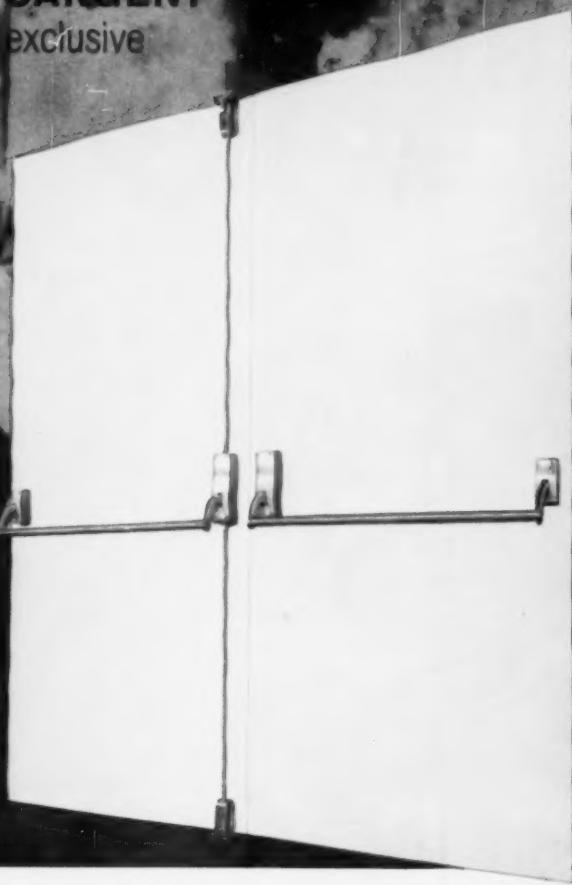
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* Tested with doors by Overly Manufacturing Company

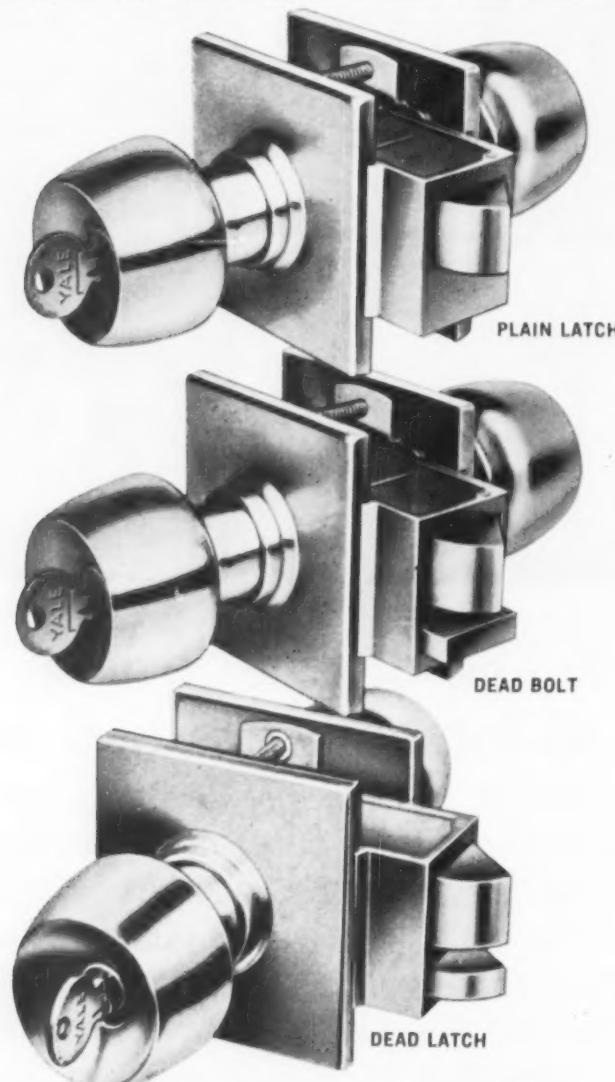


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YALE HEAVY-DUTY MONO-LOCKS THAT CAN TAKE ANYTHING SCHOOL KIDS CAN DISH OUT

These Yale locks are durable as a rock, secure as a knot and function with the smoothness that only top-quality workmanship can produce. Wide range of high-style designs and finishes. Two models: 6200 Series with 2 $\frac{3}{4}$ " backset—6100 Series with 2 $\frac{1}{2}$ " backset. The Yale & Towne Manufacturing Co., Lock & Hardware Division, White Plains, N.Y.



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in language laboratory systems
from bernco*

• Nationally known for the manufacture of high quality electronic and electro-mechanical components for military and industrial applications, Bernco now proudly unveils the newest development in electronic teaching aids . . . the MARK VII Language Laboratory.

Custom designed and engineered to the requirements of your staff's teaching techniques, each Bernco installation performs every modern Language Laboratory function, with "push button" simplicity of operation for both teacher and students.

The Bernco Console has all controls within easy reach of the teacher's fingertips. Student booths—arranged and positioned for maximum

comfort and accessibility—are equipped with the latest developments in microphone, headphones, tape deck and control panel.

Bernco's Teacher Assistance Program provides a continuing service of teaching aids to keep your staff posted on the latest techniques for improving the effectiveness of your Bernco Language Laboratory.

Compare the Extra Features

It will be well worth your while to investigate and compare this *complete* new Language Laboratory system. A Bernco Language Laboratory specialist will be glad to give you all details of this highly advanced equipment, technical service, and advisory training program.

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8 ways to enrich school curricula and improve administration

... through an economical sound-communication system

The console shown here is the central control of an Executone sound-communication system for an average-sized K-8 or secondary school. Located in the General Office, it handles switching, programming, transmission and power amplification for all the services described below—and others that your special requirements may suggest. Its 5-channel capacity eliminates the need for more than a single conduit for signals or communication between any two points in the system. Identical functions are available in a vertical console, for use where office space is at a premium.



Supplement the teaching program with sound



Classroom audio-aids can give students access to sources of important teaching materials . . . can place each class in closer relation to the school and the world around it . . . can help develop each pupil's critical faculties. Leading educators value the availability of:

Radio broadcasts: speeches; music; coverage of special events; interviews; important dramatic presentations; sessions of Congress; etc.

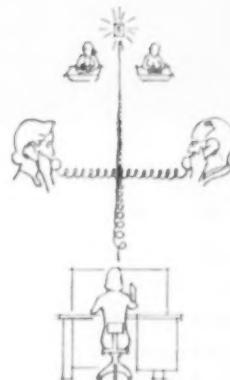
Recordings: from an ever-increasing fund of educational material on tape and discs.

Transmissions from other parts of the school: student musical programs; sports events; etc.

Recording and play-back facilities: for classes in choral and instrumental music; language and speech courses; drama workshops; etc.

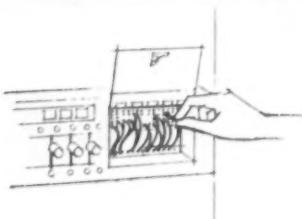
All these audio-aids can be supplied by a single Executone classroom reproducer . . . the same instrument that handles time signal, alarm and intercom functions. With a standard Executone system, any combination of rooms—chosen by selector-switches—can receive either of two simultaneous sound transmissions. Reproduction is of unusually high quality. Where recording and play-back are desired, rooms need only be supplied with microphone and tape-deck jacks. Amplification takes place at the main control console.

Speed administrative action: relieve over-burdened staff



Freedom to teach—and to work more productively—is one of the best answers to the chronic shortage of teachers and administrative personnel. Time savings increase in direct proportion to the staff's communication capabilities. Today, these can economically include: A) 2-way electronic voice intercom . . . between the office and any classroom . . . with complete privacy safeguards. B) Private-line room-to-office and room-to-room intercom . . . with call origination from any point. The Executone system offers all the above, providing 2-way remote-reply intercom through each classroom speaker . . . optional private-line handset communication using an independent channel carried by the same wiring.

Save money & space in providing variable time programs



Classes with varying time requirements need no longer be subject to an inflexible set of signals. But conventional time-programming equipment—including independent crossconnect panels, relay racks, classroom buzzers and wiring systems—is bulky and expensive.

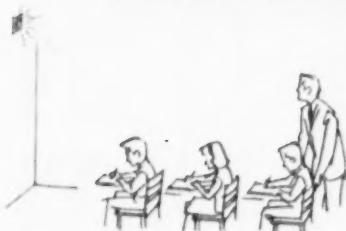
The Executone system includes a remarkably compact, easily accessible peg-board programmer—which allows each classroom to be placed on any one of six different time programs within seconds. This function is built directly into either standard console! The costly conventional system is eliminated.

Preserve student discipline during unsupervised intervals



When teachers must leave their classes, the maintenance of discipline usually depends on the presence of a substitute. Faculty members may now be relieved of this non-productive extra duty. Unattended students can be monitored from the Office—through the Executone speaker—and notified by its open-line signal light that they are under remote supervision.

Preserve the continuity of classroom activities



Communications in the modern school go a long way toward assuring uninterrupted class activities. But care must be taken that the facilities which make this possible are not themselves a disruptive influence. This is the case where calls make it necessary for teachers to drop what they are doing, to approach or handle equipment . . . or where a call interrupts a sound transmission.

Executone removes both of these contingencies. Through-the-speaker calls, for brief conversations, can be answered by the teacher from any point in the room—without raising her voice. And use of the optional handset channel for longer conversation prevents interference with concurrent sound programs.

Control student transportation

Teachers find it especially difficult to keep order—and prevent delays—when restless students must await loadings of homeward-bound school buses. This condition is relieved when children are permitted to play freely—until summoned to the loading area in proper groups and directed to their buses.



This can be achieved through an inexpensive adjunct to the Executone system: a microphone jack at the loading area and speakers at loading and congregation areas. Both microphone and speaker wiring run in the same conduit. The amplifiers at the main console are utilized. Any available microphone can be plugged in at dismissal time.

Prevent confusion and panic in emergencies

Leading administrators have long felt the need for greater control of student bodies in emergencies. They seek alarm signal facilities to augment standard fire alarm systems—for such special contingencies as air raids. To control student movements in critical situations, they wish to make it possible for any staff member to broadcast voice instructions—without having been trained in the use of sound equipment.



In the Executone system, the same components used to produce time signals will also provide supplemental alarms. Executone furnishes duplicate signal generators—for fail-safe standby duty. For follow-up voice instructions, after an alarm, a staff member need only touch the 'emergency' bar at the Executone console. This overrides all other transmissions . . . allows him to speak immediately to the entire student body.



Provide quality-controlled sound for audience activities

No audience facilities are so intensively used as those in the modern school. Auditoriums and gyms serve not only during the school day—but also for adult and community activities . . . for socials and special events. Sound reinforcement equipment must be designed to high standards. And controls must be efficient. Conventional microphone mixing units—because of A-C power, ventilation and space needs can seldom be situated where they do most good.

An Executone system provides not only sound reproduction of highest quality, but also new flexibility in the location of controls. Transistorized preamplifiers and mixers are compact enough for concealment anywhere . . . have no special installation requirements.

Executone manufactures School-to-Home telephone equipment for shut-ins.

Your Local Executone Organization Offers You Six Stages Of Service

- ① THOROUGH, PROFESSIONAL CONSULTATION OR SURVEY
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Executone
COMMUNICATION and SOUND SYSTEMS

THIS COUPON WILL BRING YOU IDEAS . . . INFORMATION . . . ASSISTANCE — WITHOUT OBLIGATION

Executone, Inc., Dept. U-2

415 Lexington Avenue, New York 17, N. Y.

I would like my local Executone Systems Engineer to call.
 I would like detailed literature on sound and communication systems for schools.

Name _____

School _____

Address _____

City _____ Zone _____ State _____

In Canada: 331 Bartlett Avenue, Toronto



Easily-installed Random Planks are $\frac{1}{8}$ -inch thick, 4-feet wide and 8-feet long.

fully-finished random-grooved paneling in six exclusive, new Trendwood® finishes

Here's the newest in paneling for beautiful, maintenance-free school interiors. Marlite Random Plank in six distinctive Trendwood finishes will add years of wear with just minutes of care to the walls of your entrances, corridors, classrooms, offices, assembly halls, libraries, kitchens, laboratories, cafeterias, restrooms and other service areas.

Your own maintenance men can install Random Plank over furring strips or existing walls without interrupting school activities. And this melamine

plastic-finished paneling needs no painting or further protection. It resists stains and mars for years—cleans in minutes with a damp cloth!

Whether you are planning to build or remodel, investigate Marlite plastic-finished paneling . . . available in a wide variety of sizes, colors, wood, marble, decorator and tile patterns. Your architect, contractor, building materials dealer will give you full details—or write Marlite Division of Masonite Corporation, Dept. 1134, Dover, Ohio.

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Rugged school use?

...No problem with Kohler
Fixtures and All-Brass Fittings

Kohler school fixtures keep maintenance costs low — even under rough treatment. They fit specific school needs. Clean-cut modern design, glasslike surfaces and smooth functioning encourage neatness.

The more than 200 Kohler fixtures in Sheboygan's new South High School include classroom, laboratory and service sinks; drinking fountains. The washrooms have Kohler lavatories, closets and urinals.

Typical of their staunch reliability is the Juneau vitreous china lavatory, with four inches of extended wall-bearing surface for extra firm anchorage. Practical for classrooms is the Addison built-in sink of acid-resisting enameled iron, with swing spout, and Duostrainer.

Kohler fittings are All-Brass — further assurance of low maintenance, because brass has maximum resistance to corrosion and wear — takes and holds chromium plating best.

KOHLER CO. Established 1873 KOHLER, WIS.



Juneau vitreous china shelf lavatory, K-1622-A.

Addison sink, K6650-A, with
Simplex pantry faucet, K-7890.



KOHLER OF KOHLER

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES • ALL-BRASS FITTINGS • ELECTRIC PLANTS • AIR-COOLED ENGINES • PRECISION CONTROLS



'61 CHEVROLET SCHOOL BUS CHASSIS—PROVED SMOOTHEST, SAFEST, SAVINGEST!

In the year since Chevrolet hit the highways with the most advanced chassis design in industry history, nearly 300,000 Torsion-Spring Chevies have gone out to show their stuff. And Chevrolet's years-ahead ride has opened a new era in transportation. The combination of unprecedented driver and passenger comfort with cost-cutting ruggedness and reliability has brightened the tightest budget picture wherever Chevies have served. Even more important is the extra safety that stems from remarkable new roadability, with safe, sure, easy handling under all road and load conditions. Emergencies are less apt to arise and easier to cope with when they do, especially with the drastic reduction in driver fatigue the Chevrolet chassis delivers. For 1961, numerous improvements and refinements give the Chevrolet chassis still more stamina and economy—it's a better-than-ever answer to your school transportation needs! Your Chevrolet dealer will be glad to give you the full details at your convenience. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



Here's why Chevrolet's years-ahead Torsion-Spring Ride is winning wide acclaim on busy school bus schedules everywhere: Independent front suspension floats each wheel over bumps with minimum effect on the chassis. Rugged control arms and heavy-duty, low-friction spherical joints guide the wheels firmly and precisely. And resilient torsion-bar springs of highest quality alloy steel swallow up road shocks with scarcely a trace. The net result is a new sensation in riding and driving ease, a combination that spells shorter trip times, greater safety, and longer life for chassis components and body.

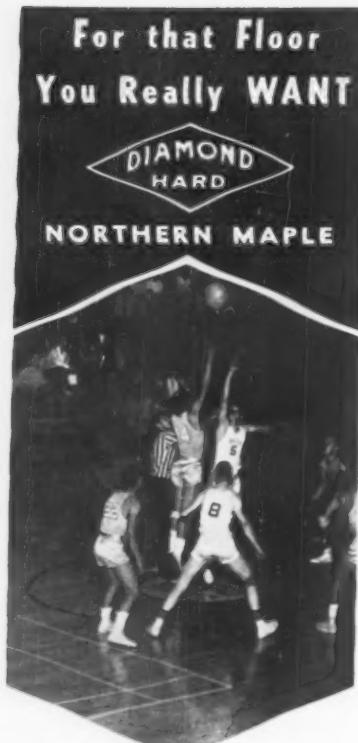
Chassis to fit every Body Size and Budget

	30 to 36 Pupils Model S5302 Max. GVW 16,000 lbs.
	40 to 48 Pupils Model S6202 Max. GVW 21,000 lbs.
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CHEVROLET FOR '61

SCHOOL TRANSPORTATION AT ITS BEST!





Gym, Andrew Hill H. S., San Jose, Calif.
Arch., Ed. W. Kress — Installer, Best Floor Co.

Don't Just "Wish"

Don't turn green with envy every time you see that latest "Big Ten" Gym in Columbus, O. in a magazine or on TV!

It's floored with J. W. Wells' famed DIAMOND HARD Northern Maple, sure! — But so is this High School Gym in California. (And hundreds more.)

Tell 'em Facts!

Call it "multi-purpose" — Combine gym and auditorium and you may have to remind them — "Most of the time it will be a gym." Lay any of those thin-skinned coverings on bare concrete and it's still dead — tough on the kids — mincemeat for those PTA'ers in "spikes" — sad substitute for J. W. WELLS DIAMOND HARD Northern Maple.

Point Out Savings

Remember too, DIAMOND HARD Northern Maple in 2nd and 3rd grade is just as lively, undentable as clear-grained 1st grade — costs 10% to 50% less.

And if you need a money-maker to help pay for it — look into community roller skating — as many other schools have. (What beats Maple for skating?)

WRITE FOR

"Money-Making Gym Floors"

J. W. WELLS
LUMBER COMPANY

Menominee 4, Michigan



ON THE SHELF

with James M. Spinning

Search for Knowledge? Yes! But Use What We Have

A SOCIOLOGICAL APPROACH TO

EDUCATION. By Lloyd Allen Cook

and Elaine Forsyth Cook. Mc-

Grav-Hill Book Co., Inc., 1960.

Pp. 371. \$6.75.

In view of all the new research studies and the acres of print in the last 20 years about social forces, community mores, child rearing, juvenile delinquency, and the role of the schools, it is a significant tribute to the Wayne University authors of this volume that, while their tables, references and case citations have been scrupulously updated, their basic points of view have required almost no revision. The book is a third edition of "Community Backgrounds in Education," which was first published in 1938 as an outgrowth of pioneer studies in the Detroit schools and area.

One might add a lament that America as a whole has so little practiced the things that we know are good and ought to be done. The necessity for continuing research into our individual and community problems should not so largely prevent our using the firm knowledge we already possess.

Deplore Class System

The book deals with relating education to society, with child socialization and the school's role therein, and with the spirit and functioning of the "healthy public school." Understand at once, please, that the authors do not for a moment suggest that the sociological is the only approach to education. They do more than indicate, however, that there ought to be a lot more of it. Though far more people are now in more schools for more years than ever before, the authors believe the view is growing that the move from lower to middle class or middle to upper class is more difficult than in the past — and we ought to be doing more about it. "As studies of social class pile up, it is clear that the class system distributes privilege unequally in school at all levels, and this disadvantages lower class youth." The authors go on to fire a round at the inequities and injustices of I.Q. obsessions.

What the Cooks have to say about the changed economic and social scene, especially about the effects of urbanization and population mobility, is hereby cordially recommended as required reading by Dorothy Thompson in the hope that she will make room in her unilateral mind for some of the things that have happened since she (and I) first went to school in western New York.

The Cooks' analysis of our too little understood subcultures and of the group (gang) forces that socialize children into antisociality is not markedly different from those more elaborately set forth by Kvaraceus and Miller in the recent N.E.A. report, "Delinquent Behavior." (See this column in *The NATION'S SCHOOLS* for October and December 1959.)

The authors have small patience with studies of the file-and-forget type. They have dynamics in their blood. They talk about *action research*, and they define a strong school as an "institution in motion." Wisely they stress the inherent differences in school problems and organization as these are governed by community size and character, and they emphasize them in their selection of case reports.

In the healthy public school the main concern is human interaction. Formal structure is less important than the fruitful informal relationships that can be developed. The healthy public school has a sense of role and mission.

No Time for "Shushing"

Whatever the normal small internal frictions, the staff works together for large objectives. The administrator accepts the fact that he is an inevitable part of any school situation, but he wastes little time saying shush to anybody. Part of his job is to see that everyone in the school is conscious of its reciprocal relations with the community and he seeks to draw the community into its functioning. "The school is people, people helping people to live and learn."

This drawing on the community is well demonstrated in the account of the organization and work of the Detroit **Citizens Advisory Committee on School** (Continued on Page 36)

HOLIDAYS are busy days

in a school that
takes advantage of its "breaks"



**Dissatisfied with the way your floors are holding up?
Now is the time to switch to Hillyard floor treatments
that clean up easily, keep a "first day of school" finish
all year long—and cut labor costs as much as 50%.**

GYMNASIUMS
CORRIDORS
CLASSROOMS
LOCKER & SHOWER ROOMS
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MULTI-PURPOSE ROOMS
ARTS & CRAFTS
HOME ECONOMICS
SHOPS
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KITCHENS
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The first step—planning. Let the Hillyard "Maintainer" give you a specialist's help. Without charge or obligation, he'll survey your floors, recommend treatments, schedule the work, and schedule materials to be on hand as required. He'll suggest latest labor-saving, dollar-saving

treatment techniques and demonstrate them to your custodial staff.

If you're not already acquainted with your local Hillyard Maintainer (he's one of more than 160 trained floor treatment technicians, coast to coast) write us in St. Joseph. Your Maintainer is.....

"On Your Staff. Not Your Payroll."

To Get the Most from Your Floor Care Dollar...

Plan Ahead with



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Branches and Warehouse Stocks
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HILLYARD St. Joseph, Mo. Dept. E-4
Yes! Please have the Maintainer get in touch with me at once.

Name
School
Address
City State

On the Shelf

(Continued From Page 34)

Needs. The two-year study, in which the authors had a very effective part, was published in December 1958. Its action phase still moves forward apace. One of its strongest recommendations is the creation of an all-city council designed to provide both a thumping ground and a mechanism in which major institutions and agencies can coordinate their interests in children and improve their service.

The Detroit study story is told in Chapter 16. Read this one before you pass the book along to your colleagues.

EDUCATION FOR EFFECTIVE THINKING. By William H. Burton, Roland B. Kimball, and Richard L. Wing. Appleton-Century-Crofts, Co., Inc., 1960. Pp. 308.

The canopy over the kitchen window in the Lady's summer home on the St. Lawrence still admitted too much glare. "Can't you fix it, Fabian?" she asked the local handyman. "Sure, Lady, I fix, I fix perfect," said Fabian. "But how are you going to fix it?" "By Gosh, Mrs. Spouse, that's just what I don't know, too."

I think of this exchange every time some gay pontifex at his maximum says,

"The business of the schools is not to teach pupils *what* to think but *how* to think." It flashes across my mind not because I believe that we can't teach something about how to think, but because we have such vague and disparate notions about how to do it. Generally speaking, that's just what we don't know, too. Of all the things we have to be humble about, this is the most!

But "Education for Effective Thinking," designed for teachers in service and training, is a good guide. It is a full-bodied compendium of *thinking* about thinking and *teaching* about thinking.

After 240 pages of defining, analyzing and illustrating the thinking process as it operates in children, this book summarizes research on ways of inducing critical thinking and then launches into a series of chapters that present specific guidelines and illustrations of ways to teach it in elementary grades — in the language arts, social studies, mathematics and science.

The authors advocate beginning with a free and lively discussion of problems that fall within the child's range of investigation and maturing interest and proceeding, at the high school level, to those inherent in his curricular and extracurricular pursuits.

We are told that while intelligence is an important factor in thinking ability, it is not the only one. Classroom teachers have wide opportunity to improve thinking skills regardless of the intelligence level of the pupils. They must seek ways of getting pupils to see that applying subject matter to the solution of problems is the important outcome rather than just arriving somehow at a solution. The writers do not hold with the intellectual disciplinarians. Hard work, yes, but hard work for what? The bulldozing must have a purpose. Pupil as well as teacher must know the what and the why.

Young people are to be encouraged to raise questions, identify problems, list possible solutions, test the solutions for weaknesses, and try again. Restatement of the problem and a clear definition of terms are repeatedly emphasized, but there is no plea for the teaching of formal logic or rigid applications of its canons.

I can't remember that the word *syllogism*, much less *enthymeme*, appears anywhere in the book. At the high school level some knowledge of semantics is recommended, and neatly balanced in another chapter is a delightful quotation from Ivor A. Richards: "The great disease of knowledge is that in which starting from words we end up with them."

The book takes the familiar mid-stance on the question of transfer of

How DUDLEY gives you the best in Combination Locker Locks



RD-2
Rotating Dial Combination Padlock
Solid stainless steel case with white numbers on black enamel.



RP-5
Combination Padlock with Revolving Knob Pointer
Solid brass case with white numbers on black enamel.

Every Number Works

Dudley Combination Locker Locks operate with a 3-number combination on a dial with 40 divisions giving 64,000 possible combinations. Most important is the use of all three numbers—not just two.

As the hasp is pushed in place when locking, the last number spins out of position and cannot be identified, thus making use of the full three numbers.

Each number of the combination is a working number, making the discovery of the opening combination by trial and error, a practical impossibility.

This is just one of the advantages of Dudley Locks which made them favorites among school people everywhere for 39 years.

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The standard of controlled locker protection since 1921

It gave me a new lift out of life



"I never dreamed
how much a
Study-Center
could help
a child"



© 1960 American Seating Co.

"**A** TEACHER is bound to get some pretty firm ideas about school furniture. Imagine how pleasantly surprised I was to report to a modern new school with American Seating Study-Centers for the students!

"I'm the luckiest teacher in town.

"The Study-Center is attractive and colorful — you'd be surprised how much more comfortable and relaxed this makes a classroom look and feel. It's neat and uncluttered, with a marvelous roomy book-box.

"It's all in one piece, yet surprisingly light. I can have my pupils rearrange their Study-Centers into new groupings within minutes . . . and much as they'd like to, they just can't make much noise doing it!

"It's comfortable. You can be sure of this when you see a roomful of children *not* slumping, *not* squirming, *not* fidgeting.

"The seat swivels both ways, so the children can move about freely without disturbing others. The top can be sloped or set level — whichever angle is best for vision and posture. Both seat and desk-top are adjustable. Believe me, it's so much more satisfactory to fit the desk to the child than the child to the desk.

"How much difference does a Study-Center make? Until we moved into our new school, for example, Johnny Burton was definitely a teach-

er's problem. He not only wouldn't do his best — but he created disturbances which disrupted classwork and kept others from doing their best.

"Since he's had an individual Study-Center — a desk that doesn't restrict his movements — he's not noisy any more, and his work is improving.

"I have another pupil — a gifted young girl. I couldn't get her to raise her eyes more than two inches above the top of her pencil at her old desk. She's been sitting up like a doll since the first day she got her Study-Center. Posture problems, reading problems, and many emotional problems with students have vanished.

"I think we sometimes forget how many hours children spend sitting . . . learning to concentrate, learning to get along with one another, learning to use their hands and their minds. A desk has to be a very versatile piece of furniture to fit in with all of the many ways we teach and learn.

"I've mentioned this to mothers lately when they've remarked about the improvement in their children's grades and attitudes toward school. And when our discussions turn to improving evening study habits, do you know what I tell them? Get Study-Centers for their children's rooms. Study-Centers can work the same wonders at home as they do at school."

Point to remember: Schools are built to give students a place to sit and learn (they'll *sit* 15,000 hours, kindergarten through college). Thus, the selection of school furniture demands your serious consideration. School furniture is the *most important* single equipment purchase you're called upon to make that affects both the physical and intellectual development of children. So when it comes time to buy furniture, think in terms of eager, ambitious youngsters.

Study-Center is a trademark of the American Seating Company.

NEAT?...OR...BEAT?



Study-Centers give students a lift for life.



Eliminate posture problems of old-fashioned furniture.

Once a Study-Center Desk is adjusted to a child, posture problems disappear forever.

With a Study-Center, it's actually an effort to slouch or slump.

Your children will sit at desks 15,000 hours, kindergarten through college.

See that your schools have American Seating desks (there's a type for every need).

A Study-Center costs less than a penny a week more than ordinary furniture.



The standard by which all public seating is measured

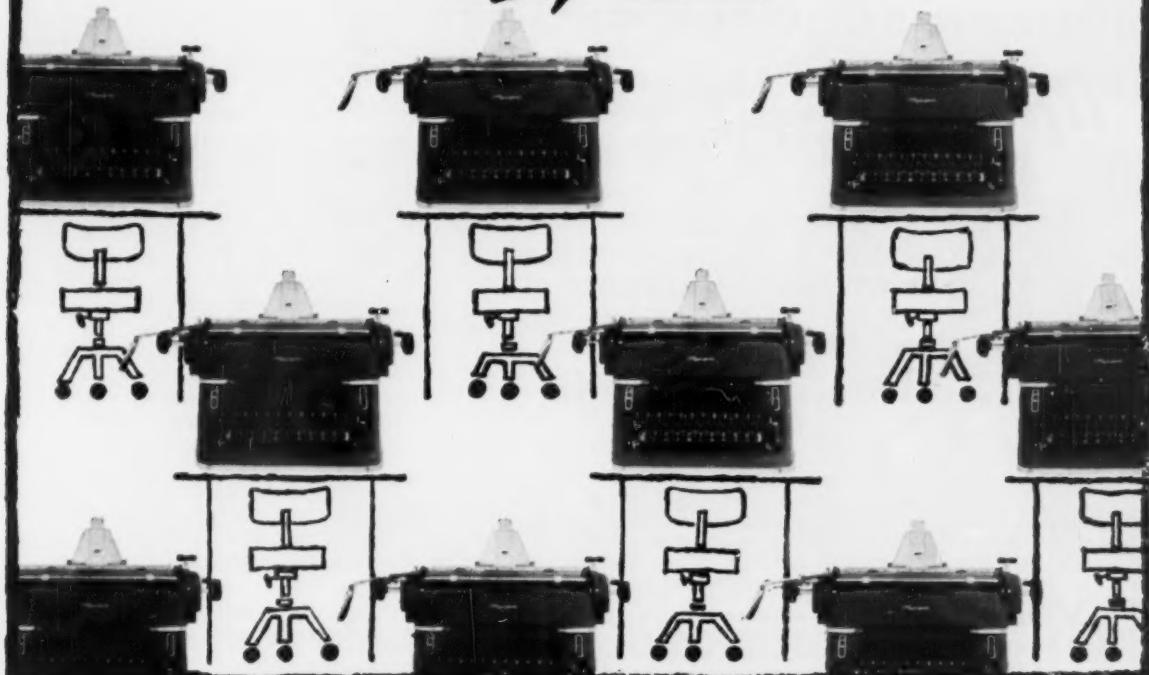
GRAND RAPIDS 2, MICHIGAN

MANUFACTURERS OF SCHOOL, CHURCH, AUDITORIUM,
STADIUM, THEATRE, HOSPITAL, AND TRANSPORTATION SEATING,
FOLDING CHAIRS AND TABLES

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*One of a series of public service advertisements currently appearing in
LIFE, TIME, and THE SATURDAY EVENING POST.*

**"...COMES A PAUSE
IN THE DAY'S
OCCUPATION..."**



...KNOWN AS THE TEACHERS' HOUR!

A time to relax—a time to reflect! Are the fledglings progressing? How's their technique...speed—stance—stroke? It's satisfying to be a perfectionist...and to help develop this in other minds and hands. Credit, too, for the precision-built Olympia Typewriters...serving as partners in perfection.

These superb typewriters come fully-equipped with the finest, most advanced typing aids...from exclusive spring-cushioned keytops to convenient half-spacing. Features that are easier to teach with...to learn on!

Important, too, is Olympia's reputation for easy, quiet, trouble-free performance, year after year...cutting maintenance costs to an absolute minimum.

Olympia
"Writes best of all—because it's built best of all!"

No wonder more and more schools, from coast to coast, are selecting Olympia. Why not put one to the test yourself—before you decide on any other typewriter!

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ALAN C. LLOYD'S
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Teacher As
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...an informative
series of articles on
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Gentlemen:

Please send me a copy of Alan C. Lloyd's articles... "The Typing Teacher As A Technician"... to the address below.

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On the Shelf

(Continued From Page 36)

training from one subject area to another. It holds that the more common elements there are in any two disciplines, the more readily does transfer occur. Pupils should be led to look for these elements. Yet I caught no illustrations of transfer in the chapters on thinking in specific subject fields.

Without getting polemic about it, the three wise men who wrote this volume make a strong case for the need of improved thinking in a world (this one) in which wishful wishing, singing slogans, and shoddy propagandizing are on

the make. More than that, they get down to subjects and cases. They could be a great help to Fabian.

PROFILE OF THE SCHOOL SUPERINTENDENT.

By Sam M. Lambert,
director, research division,
N.E.A., American Association of
School Administrators, 1201
16th Street, N.W., Washington
6, D.C., 1960. Pp. 126. \$1. (discount for quantity)

The profile of the urban superintendent looks good on him. He may not be

pure Barrymore, but neither is he Andy Gump, Jimmy Durante, or even Bob Hope.

This valuable piece of research should change even the superintendent's view of his composite self and lead him to look again in his personal mirror. As the information the report contains seeps into the consciousness of those who write about education in the daily press, the slicks and the pulps, it should affect for the better the public picture of the school administrator.

The chief findings were included in the 1960 Yearbook of the A.A.S.A. and listed in the review of that volume which appeared in this column last February. There is little need to re-review them now. It might be well, however, to say again that most superintendents actually like their jobs and "would do it all over again."

Furthermore, the content of the book is given so clearly and succinctly that every superintendent will want to peruse every bit of it for himself, including the green appendix that makes up a full half of the slender volume and contains a copy of the questionnaire and 56 tables. The data on preparation, personal qualifications, and career patterns should be of absorbing interest to members of the craft.

Even more interesting will be the profile when, and if, it may appear 5, 10 or 20 years from now. Will the superintendent's training and accomplishments improve? Will his satisfactions wax, his woes wane? I can hardly wait to find out.

Letter to Ben Willis

Speaking of profiles, there is one of Ben Willis ("Man in a Hurry") in the *Saturday Review* of September 17. It prompts the following open letter:

Dear Ben:

We are glad to have the first installment of SR's monthly supplement on "Education in America," as sponsored by the Fund for the Advancement of Education and edited by Paul Woodring. SR always has been intelligently and provocatively interested in education.

What we deplore about this first number is its portrait of you as an unprincipled loafer always ready to knock off work at 4 a.m. and snatch a couple of hours of unnecessary sleep. We want you to know that we regard you as an inspired leader and indefatigable worker for the best in American education. We don't believe you sleep at all. We'll go to bat for you along with the thousands of schoolmen who vote for you every time. Don't be discouraged by your past successes. Keep trying!

Relentlessly yours,
S/ Shelf

MODERN SCHOOLS CHOOSE



For
Versatility
Durability
Economy

Students-Teachers and Supervisors, Administrators and School Boards, all prefer Mitchell multi-purpose equipment . . . each in their own way. Students like the accessibility, beauty, and comfort of the Portables, Doublers, and UniTables. Teachers and Supervisors want the safety, speed and easy operation, practicality and mobility found in these units. Administrators and School Boards rightfully regard long-range utility, reduction of replacement costs, and the standardization offered in this complete line, as primary considerations. All of these advantages, and more, have long been accepted from coast to coast, as Mitchell standards of guaranteed quality. You'll find that Mitchell will meet your needs the best.

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2734 South 34th Street
Milwaukee 46, Wis.

Please send me literature on Portables

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Please send me the name of nearest representative.

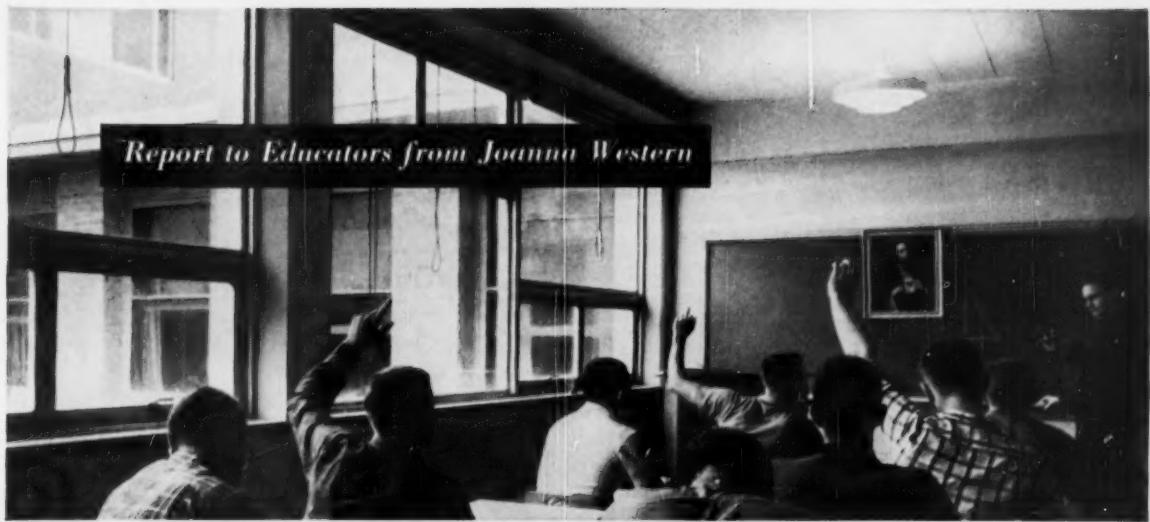
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Address.....

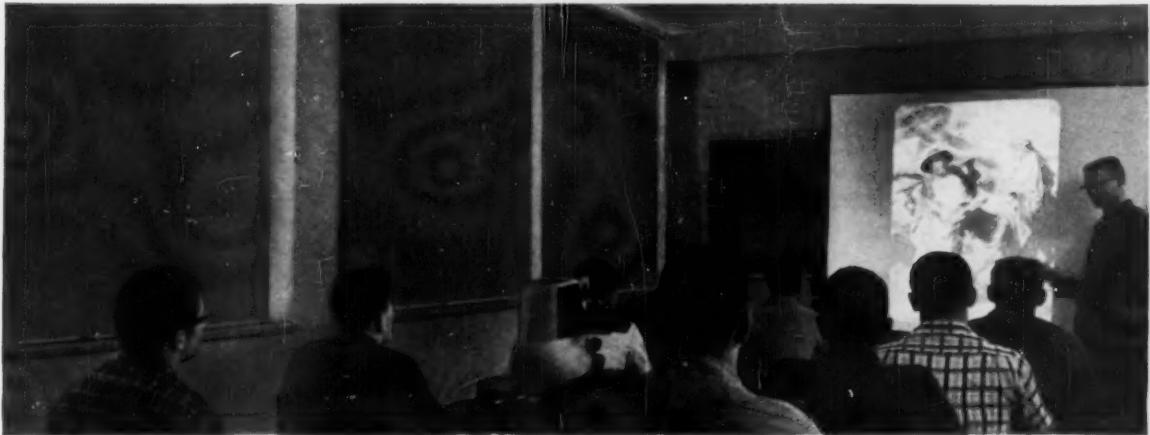
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MAKE USE OF
SPECIFIC DATA
ON THESE
Mitchell PRODUCTS
FOR YOUR SCHOOL





At Loyola Academy, Wilmette, Illinois ...



... opaque shades convert classrooms to audio-visual rooms — fast.

How to Control Light...to Light up Young Minds

Regular classroom work is coordinated easily with audio-visual presentations at Loyola Academy. All of Loyola's 37 classrooms are equipped with Joanna EXLITE Shades. Rooms in the proposed new second story on the eastern wing will have them, too. Thus, films, movies and slides can be shown right in the classrooms, thanks to these opaque shades which provide 80% to 85% light exclusion.

"Audio-visual teaching techniques are becoming increasingly important and take up to 33% of in-class time," says Father C. E. Conroy, Administrative Assistant, Loyola Academy, Wilmette, Illinois. "And, moving from classroom to projection room is not only time-consuming, but distracts students from the subject matter."

"Shades for the 37 classrooms cost \$3,000—\$4,500 less than draperies—and maintenance costs have been negligible," says Father Conroy.

No matter what light control your various classrooms and laboratories require, Joanna Western makes a specialized product to fit your needs. Have your secretary mail the coupon at the right for complete information.

VINYL EXLITE is washable, flame resistant. Comes in 5 colors, widths to 77 inches. Exlite is just one of many window shade and louvered shutter and door products made by Joanna Western.

Mr. Bill Berry
Joanna Western Mills Co.
22nd and Jefferson Streets
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Please send me complete information on Joanna Western light control products. I understand there is no cost or obligation.

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*Charlie
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HE CAN'T PULL A LEVOLOR VENETIAN BLIND DOWN

Because, not only are LEVOLOR installation brackets made of heavier, stronger metal, but LEVOLOR installation brackets have a two-way safety catch. Even when not completely locked, the blind cannot come down.

Information that insures the best installation possible is a service all LEVOLOR representatives will give you. They will submit a prospectus covering every detail of your Venetian Blind installation—help with the specifications and make a final inspection *after* the blinds are installed. It is a service that guarantees good specifications and good Venetian Blinds.

LEVOLOR TRADE MARK OF LEVOLOR LORENTZEN VENETIAN BLINDS
AUDIO-VISUAL CONVENTIONAL SKYLIGHT

Levolor Lorentzen, Inc., 720 Monroe St., Hoboken, N. J.

THE SCIENCE OF AIR SANITATION

and Its Importance in Reducing Sickness Absenteeism

Q: What effect has OZIUM glycolized spray on airborne bacteria?

A: Germs need moisture to live and propagate. OZIUM (high pressure) spray coats airborne micro organisms with a hygroscopic glycol film, interferes with their metabolism, blocks their growth.

Q: How long will the OZIUM spray remain effective in the air?

A: This depends on varying conditions, such as drafts, temperature, humidity and traffic, but tests indicate that OZIUM glycolized spray will remain effective as long as two or three hours after one spraying. Bacteriological tests made at a very large industrial plant show that bacteria count was reduced by 80% two hours after OZIUM spraying. Eight tests were conducted during this two-hour period (copy of verifying letter mailed on request).

Q: Has OZIUM itself any odor?

A: Yes, a light, fresh fragrance is added to the triethylene-propylene formula as an indicator. The fragrance quickly fades while the glycol spray continues its effective work. No annoying after-odors are encountered.

Q: Has OZIUM any value in holding down bacteria-laden dust and lint?

A: Yes. The glycolized hygroscopic spray literally sweeps the air and will even help remove eye-smarting tobacco smoke.

Q: Will OZIUM help our sanitizing program?

A: Yes, but it should be used in conjunction with a thorough sanitizing plan including surface-cleaning germicidal detergents and soaps.

Q: Is OZIUM economical in use?

A: Very much so. The No. 500 Ozium dispenser releases 500 or more individually measured sprays—thus, specific spray dosage is dispensed and wastage eliminated.

Q: Where should OZIUM be used?

A: Wherever air sanitizing is necessary, and especially where it is desired to effectively remove medicinal and body odors as well as those emanating from burns, cancer, colostomies and gangrene.

Q: Where do we buy OZIUM?

A: Your supply dealer probably has stocks. If not, he can obtain them promptly from us. Professional OZIUM is not sold through retail stores.

Q: What do medical authorities say about OZIUM?

A: "We find OZIUM very beneficial for reducing airborne bacteria and removing bothersome odors . . . we use it throughout our buildings."

OZIUM®

THE WORLD'S
FASTESt AND
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WITH FINGER-TIP ACTION—AND MEASURED SPRAYS



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"the safe way out"
in stainless steel

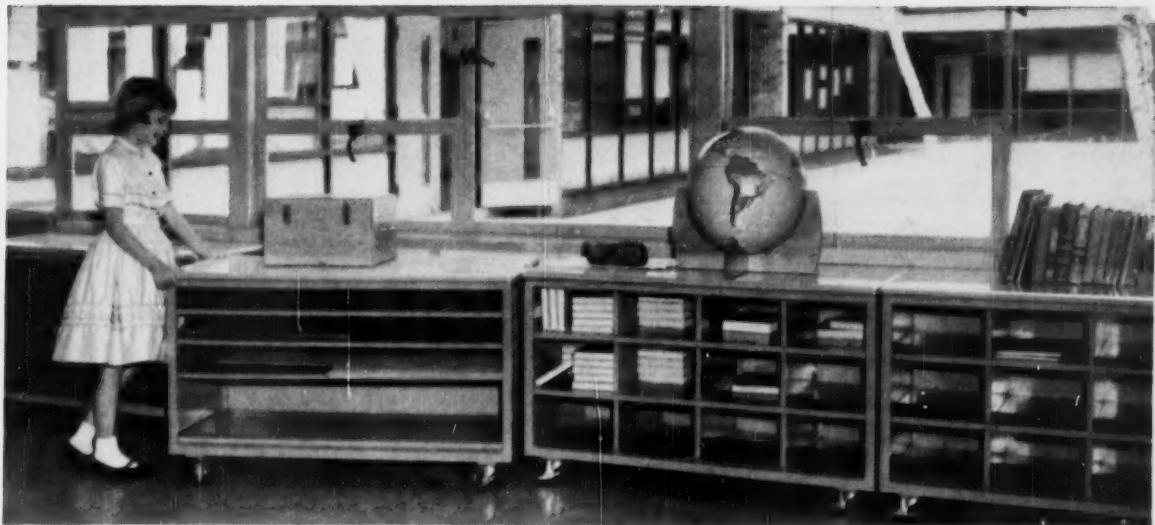
- Stainless steel . . . slim silhouette
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They're all yours in the Von Duprin 66,
the exit device that introduced the industry
to the practical beauty of stainless steel.

Available in rim, mortise lock and
vertical rod models (in bronze as well
as stainless steel) with a smart new series
of matching outside trims.

Write for your copy of Bulletin 581 . . .
full details on construction, function
and accessory items.

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No "SPACE PROBLEM" Here...



"Attractive use of color, durability and superior steel construction made Grade-Aid Classroom Equipment our first choice."

Mr. Virgil G. Sheeley, Principal
Guilderland Elementary School



The Guilderland Elementary School, Guilderland, New York — each classroom is equipped with several Grade-Aid mobile classroom units for time-saving convenience, extreme space flexibility. Original architects were Perkins and Will; architects for the 1959 addition were Urbahn, Brayton and Burrows.

ONLY GRADE-AID OFFERS ALL THESE FEATURES!

- Heavy 20-gauge furniture steel, with corrosion-resistant hi-bake DuPont Dulux enamel finish.
- Seamless one-piece stainless steel tops or melamine plastic sink counter tops.
- Full wrap-around base, concealing casters. (Not used in photos above)
- Standard 21" depth to save floor space and for convenient arm-length storage.
- Continuous wall-to-wall counter tops, if desired.
- Birchwood pattern melamine, plastic doors and tops to blend with natural wood decor.
- Sliding doors available in steel, hardboard or plastic surface in a variety of Grade-Aid colors and patterns.



GRADE-AID® STEEL CLASSROOM EQUIPMENT

In the Guilderland Elementary School, *all* available space is utilized, with the help of modular, mobile Grade-Aid Classroom Equipment. Versatile Grade-Aid units are designed for maximum utilization of classroom space, simple rearrangement to meet changing space requirements and storage needs. All counter storage models are available in six heights to fit all grades.

All Grade-Aid equipment is constructed of heavy 20-gauge furniture steel for fire safety, durability and economy. It's easy to keep clean and maintain — no warping, swelling or rotting can mar the lasting beauty of steel.

If there's a storage problem in your school, investigate the finest — Grade-Aid Steel Classroom Equipment, including a complete line of sink units, wall and counter storage cabinets and wardrobes.



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CORPORATION
46 Bridge Street, Nashua, N.H.

*Please attach to your
business letterhead.*

Please send me your full color catalog on the complete line of new Grade-Aid all-steel school equipment.

NS-11

Please send me the name of your nearest representative.

Name _____

Title _____

11:00 A. M.

This movie is really sharp! Not a light leak anywhere.

REASON: The windows in this room are light-controlled with Flexalum Audio-Visual Blinds. These blinds make any room theatre-dark anytime. Here's why: (1) more slats per height plus (2) patented notch in each slat that permits adjacent slats to touch, equals (3) no between-slat light leaks. (4) Light-trap channels eliminate around-the-edge light leaks.

11:10 A. M.

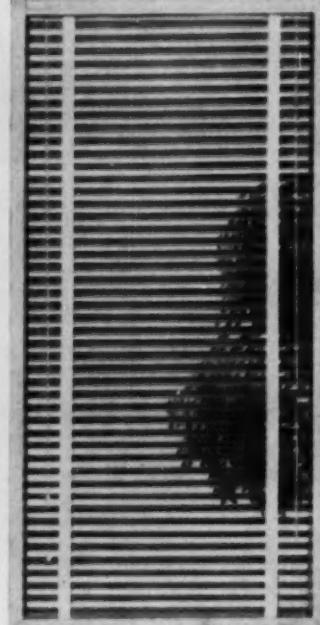
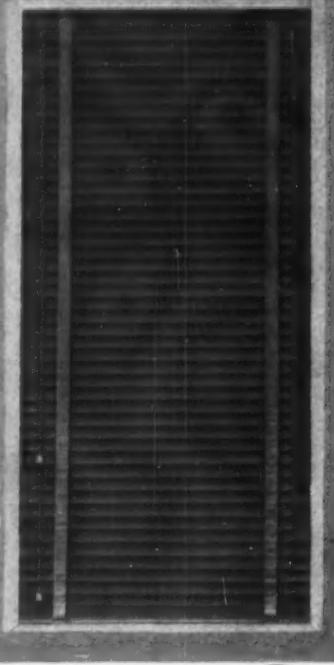
The slides look great. Just enough light to take notes.

REASON: You get just the degree of light control you need with Flexalum Audio-Visual Blinds. No other form of blackout covering allows you this flexibility. And Flexalum Audio-Visual Blinds will always stop and stay just where you want them. They're precision engineered to operate so flawlessly, they're guaranteed in writing for five full years.

11:20 A. M.

Back to groupwork. Full daylight, instantly—no glare.

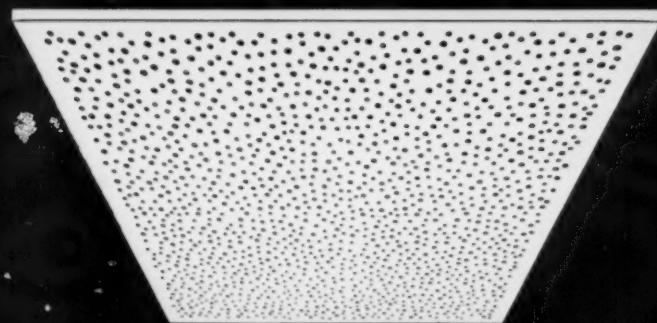
REASON: Nothing to take down, nothing to tug back. No wasted money for multiple coverings, no wasted classroom minutes. Flexalum Audio-Visual Blinds do the whole job—taking you from projection darkness to full light (or anything in between) with just a flick of a nylon cord. The plastic lined side channels eliminate all noisy flutter!



Get full-range light control—at low cost—with *Flexalum*® Audio-Visual Blinds!
Bridgeport Brass Co., Hunter Douglas Division, 30 Grand St., Bridgeport 2, Conn.

SPACIAL SILENCE

WITH BESTWALL'S SENSATIONAL NEW INCOMBUSTIBLE ACOUSTICAL TILE!



"Spacial Silence" aptly describes the principle which gives Bestwall's new Incombustible Acoustical Tile high sound absorbing efficiency. This results from: [a] fully drilled face, [b] porosity controlled membrane on back, [c] "Spacial Area" required above tile.

Attractive and low-cost, this 24" x 24" lay-in unit, designed for exposed grid suspended ceilings, comes in both plain and textured factory finishes, which have high reflectivity and are washable. A glass-fibered reinforced gypsum core increases the tile's strength and fireproofing qualities.

SPACIAL SILENCE

BESTWALL

BESTWALL GYPSUM COMPANY

Ardmore, Pennsylvania

Plants and offices throughout the United States

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Vol. 66, No. 5, November 1960

For additional information, use postcard facing back cover.

49

When you plan to build a school... let the application specialist from your local gas company help you, your architect and consulting engineer choose the most efficient system for heating, cooling and ventilating. Below you'll see how modern gas equipment can give your school complete classroom comfort—at reasonable cost.

How your GAS company can



1. The Planning Team Right from the beginning, when you have chosen the architect for your new school, you realize that your project calls for a lot of teamwork—particularly in the design for efficient heating, cooling and ventilating systems.

A great help at this stage . . . for school management, architect and engineer alike . . . is the counsel of your local Gas Company regarding the economy and application of modern gas equipment for these systems.

Heating, cooling and ventilating facilities in many of the largest, most modern schools have been planned with the help of local Gas Companies' application specialists.

You can take advantage of this qualified help by setting up a very effective Planning Team: School Management—Architect—Engineer—Gas Company.



2. The Complexity of Specification Writing

Your architect's and engineer's knowledge of specification writing plays a major role in increasing the value of your school and keeping costs at a minimum. But your acquaintance with this vital function of school planning can be of assistance to them.

There are four major recognized methods of specifying materials and equipment for new building projects, such as your new school:

a. The "Descriptive" Specification. Materials and equipment are described in detail, but no brands specified. Time may be lost in seeking the exact equipment described, and there is little assurance of quality.

b. The "Flat" Specification. Exact brand is specified. No substitutes allowed. No protection against high costs.

c. The "Open" or "Or Equal" Specification. Several makes are named, or the specification describing the required equipment includes an "or equal" clause. Contractor must submit his lowest bid regardless of quality. Manufacturers may hesitate to bid their lowest prices, since contractor is free to "shop" for even lower prices (to his

advantage) after he is awarded the contract.

d. "Base Bid With Alternate." Specific brands are specified for the base bid, but a bidding contractor may propose substitutes. This assures quality and permits alternatives, providing the contractor states in his bid to you the actual deduction or addition. You can then compare price, quality and service of several manufacturers on an equitable basis. *School authorities agree that this is the most acceptable type of specification.*



3. Specifying for Present and Future Needs

You may not plan now to operate an all-year school. But this subject is being considered by many school authorities. In fact, an 11- or 12-month school has been tried and is now being used. If there's a possibility your school may change to this system in the future, it would be wise to plan *now* for year 'round heating, cooling and ventilation.

Even your *present* needs may call for an all-year operation, with such activities as summer school programs (including "make-ups" or, in the case of gifted children, "speed-ups") . . . community recreation . . . adult education . . . civic functions . . . or perhaps a community library service. The success of such projects is well worth the investment in facilities for year 'round comfort.



4. Wide Choice of Systems for Year 'Round Comfort

Contractors of modern gas equipment for year 'round heating, cooling and ventilation offer an unusual variety of systems—designed to meet the needs of every type and size of school, regardless of geographical location. Here are some of the choices:

a. A conventional hot water system using convectors or radiators, usually supplemented with exhaust fans for ventilation.

b. Radiant gas heating used in combination with a ventilating system.

c. A central or zoned system combining heating, cooling and ventilating in the same system of ducts.

help you build a better school

d. A system such as the unit ventilator, using individual heating and ventilating units in the area served.

Each system has its own advantages and limitations which must be considered in the plans for any school. Your Gas Company application specialists can help you and your architect in the selection of the proper system.

Whatever system you choose, with modern gas equipment you can be sure of:

Safe operation

Reliability of equipment

Dependability of energy source

Simplicity of installation, maintenance and operation

Long service life

Cleanliness

Fuel economy

Healthful, ventilated air

fuel matches the long-run economy of gas. Fuel costs—as opposed to first costs—will continue for the life of your school. So they deserve serious consideration in your original planning. As a matter of record, many schools have amortized the first cost of their gas equipment through comparative savings on fuel. Thrifty gas keeps your operating costs down all year, every year.

5. Year 'Round Gas Air Conditioning More and more school managements agree that an investment in equipment to condition air is worth more when it provides year 'round service. And since gas air conditioning systems deliver heating and cooling—using the same basic fuel—they are unusually efficient, economical and space-saving for year 'round operation.

A complete year 'round gas air conditioning system will:

Cool the air in summer

Heat it in winter

Remove excess moisture in summer

Add adequate moisture in winter

Remove stale air and provide effective fresh air ventilation at all times

Remove air-borne dirt

Insure balanced distribution of the air, with temperature thermostatically controlled.

Gas equipment offers complete classroom comfort—regardless of weather or season.

7. Gas—The Safest Fuel The gas industry has a prime interest in the safety of your pupils. The more than 200,000 people in the gas industry—most of them with children of their own—have seen to the security of each installation.

No other industry in the United States has encouraged such rigid self-regulation to insure the safety of its product in homes and schools. Through the American Gas Association Laboratories, gas equipment is tested to meet the stringent requirements of the American Standards Association. The gas industry has drafted safe installation methods which are practiced by every Gas Company in the country.

Most important, the gas industry has cooperated with municipal authorities to have your building codes reflect the most up-to-date practices regarding the safe installation and safe operation of gas equipment.

8. Gas—For Complete Classroom Comfort All Year Long Your pupils can learn more—your teachers can teach more effectively—in more comfortable surroundings. Let your Gas Company help you and your architect choose the most efficient system for heating, cooling and ventilating. Just call your Gas Company and ask for their Application Specialist.

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FOR COMPLETE CLASSROOM COMFORT
HEAT AND COOL WITH GAS

6. Gas—The Economy Fuel For modern year 'round heating and cooling systems, no other

TRIPLING a shower room's CAPACITY with emphasis on safety.

Imaginative engineering found a "better way of doing things" to solve the problem of over-crowded locker and shower room conditions at Niles Township East Community High School. Not only was locker space greatly increased and shower capacity tripled—the shower room itself was provided with major safety benefits, practically foolproof water temperature regulation and economy of operation.

The showers are the progressive type, used primarily for warming up or cooling down on entry or exit to pool or gym. Located in what was once unused space, they are arranged in three double tiers, one set at 95°, one at 100° and the other at 105° by means of three Powers Hydroguard Thermostatic Controls.

Showers are operated from a convenient panel to which only the instructor has access. Here,

through an "on" button, a timer actuates three valves connected to the Hydroguards to limit water flow to 10 minutes. The shower system can be shut off at any time by depressing an "off" button which automatically re-cycles the timer. In addition, individual switches for each tier provide manual operation when desired.

Core of the system is the Powers Hydroguards, set to the previously mentioned water temperatures. The Hydroguards protect the bathers at all times against temperature fluctuations that might cause scalding or other mishaps. Should either the hot or cold water supply fail, they immediately shut off the showers.

From an operational standpoint, four-year figures show that controlled timing and controlled temperature can lower a school's budget through water and fuel conservation.

Niles Township East Community High School

Architect: Edwin C. Bruno, A.I.A., Skokie, Ill.

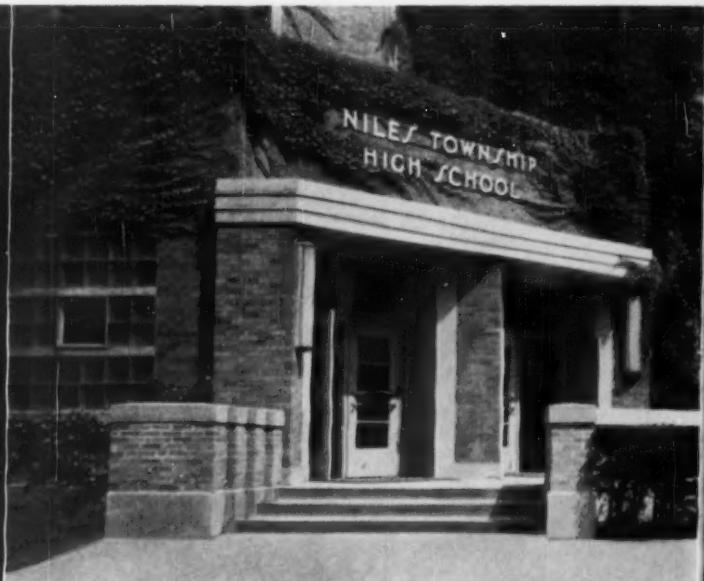
Consulting Engineer: John S. Horner, Libertyville, Ill.

Plumbing Contractor: Chas. Conrick Co., Chicago, Ill.

Head Custodian: Jules P. Roels

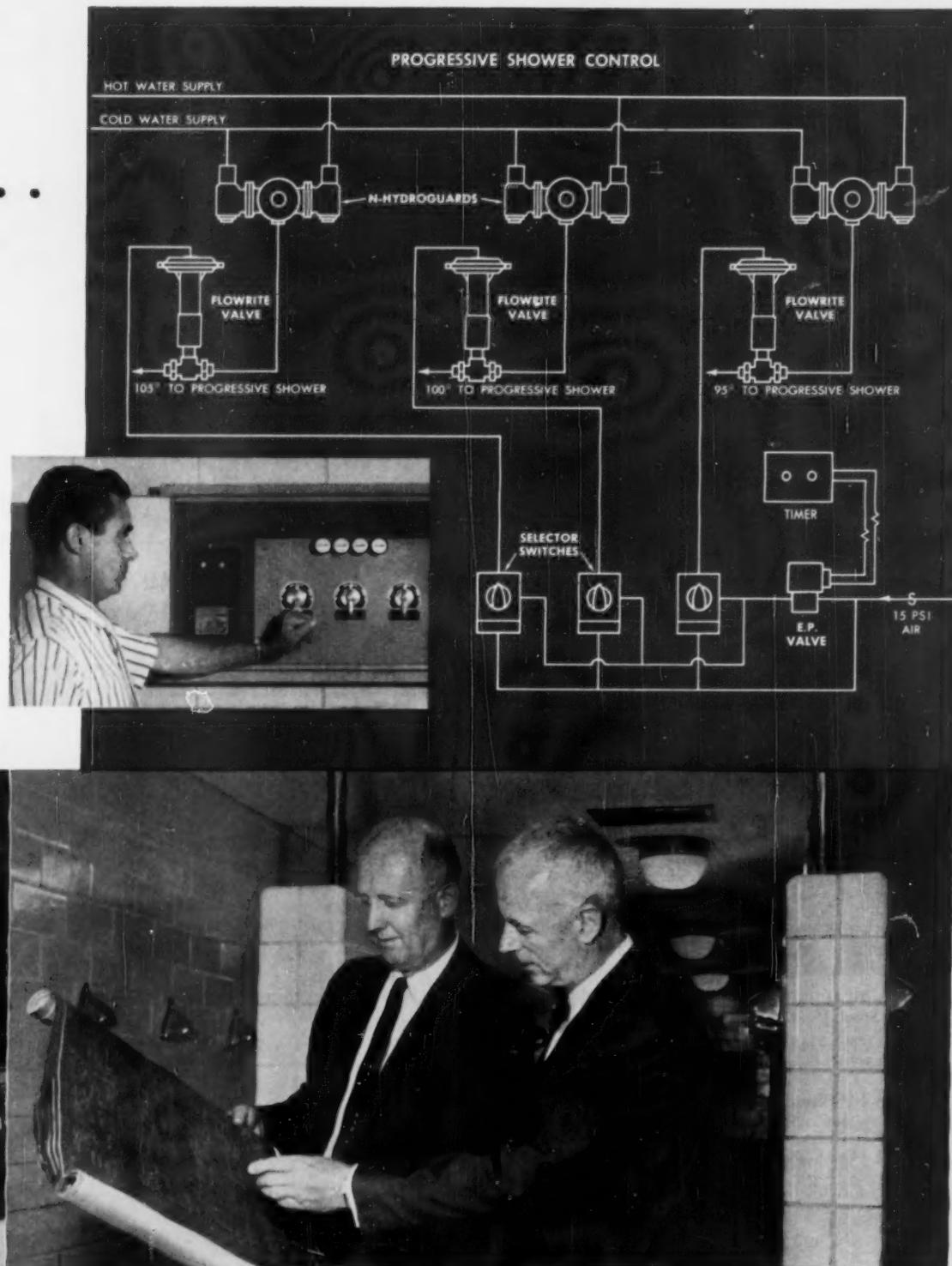
Upper photo on facing page shows Jules P. Roels at the operating panel.

In lower photo, John S. Horner and Edwin C. Bruno stand at pool end of shower.



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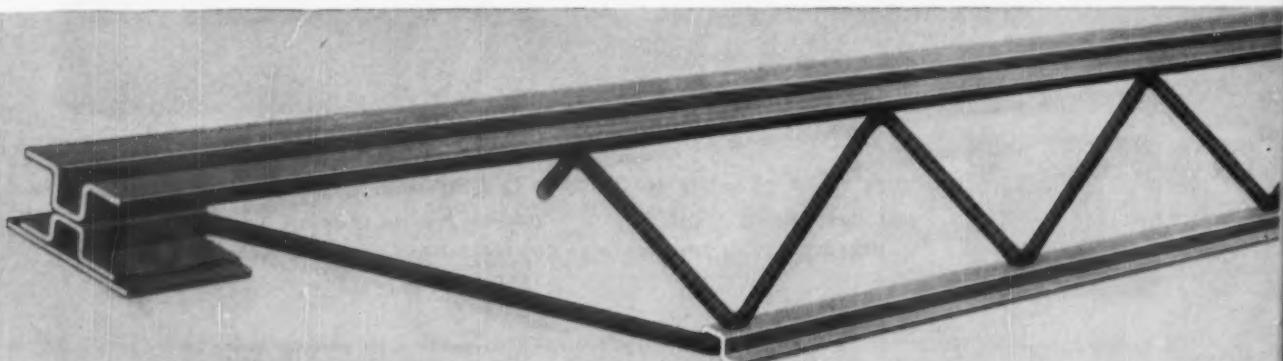
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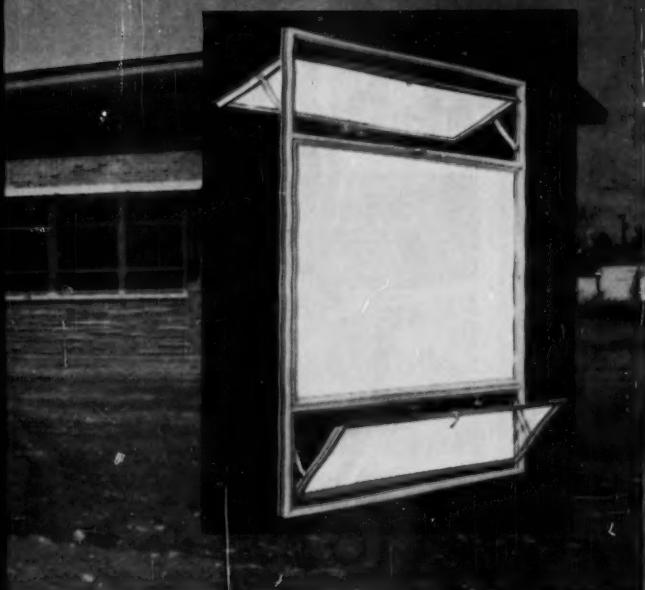
Truscon continues to exceed the rigid standards of the Steel Joist Institute Quality Verification Program—your assurance of predictable, dependable load-bearing.

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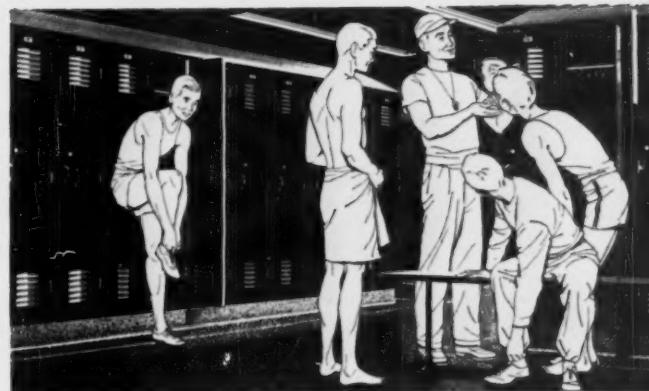
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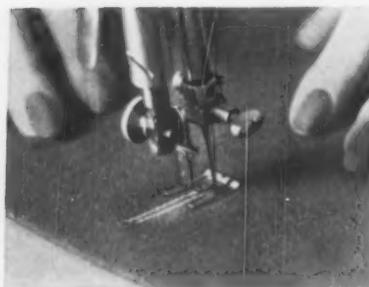
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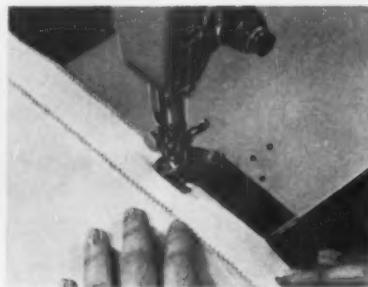
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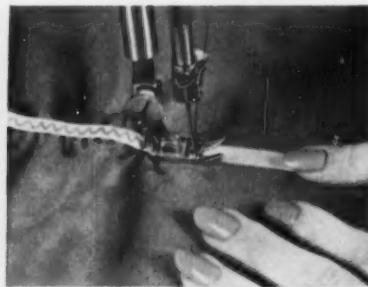
9 reasons why a sewing course is incomplete without a *SLANT-O-MATIC* machine



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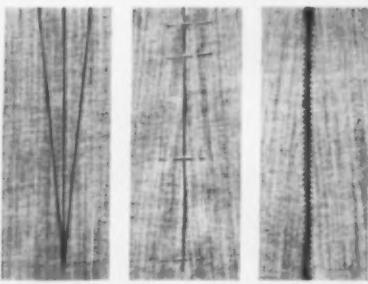
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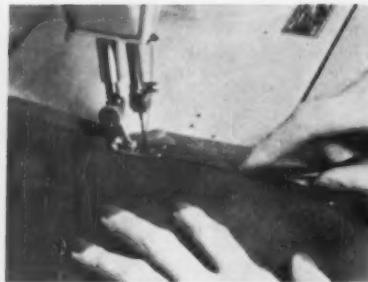
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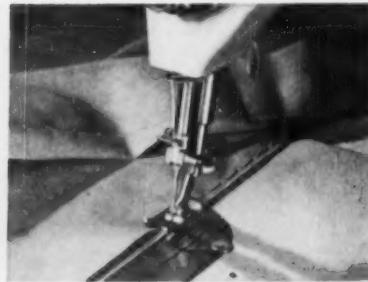
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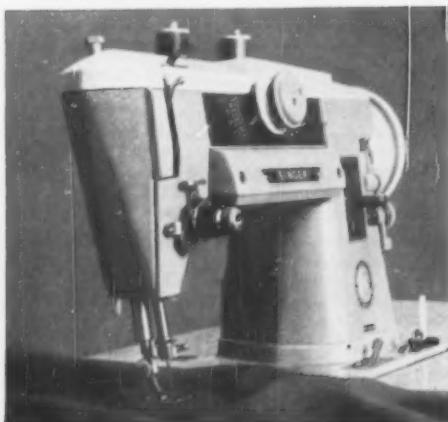
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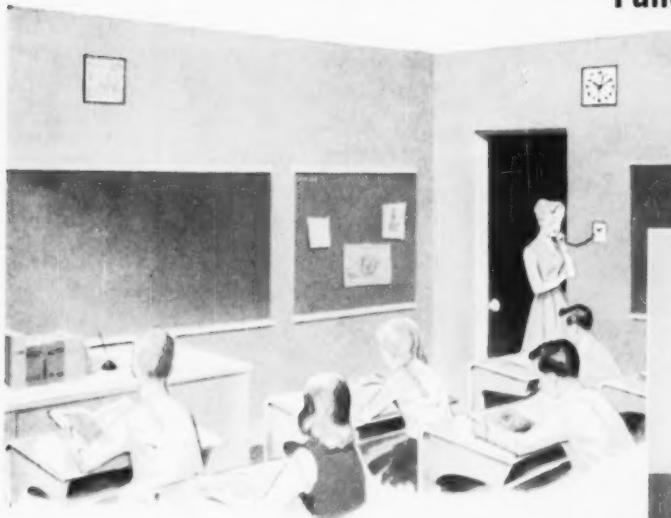
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"Functionalism without Frills"



Telephone permits private, two-way communication.
Wall speaker provides for general announcements,
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Wiring is in same conduit as clock and program system.



PRACTI-CALL system is incorporated
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control board (background)
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Here at last is an *economical, sensible* communication system designed especially for schools. PRACTI-CALL fills *all* school communication needs:

1. General announcements, news, special events, emergency instructions, etc. are communicated to all classrooms simultaneously through an "all call" speaker system.
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With all its flexibility of use... an adaptability never before available... PRACTI-CALL costs *substantially less*. No bulky, high cost console... no intricate mechanisms to go awry.

IMPRESSIVE INSTALLATION SAVINGS—All basic wiring runs in the *same conduit* as the school's clock and program system... effecting additional important savings on installation.

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Request Bulletin No. 248 containing
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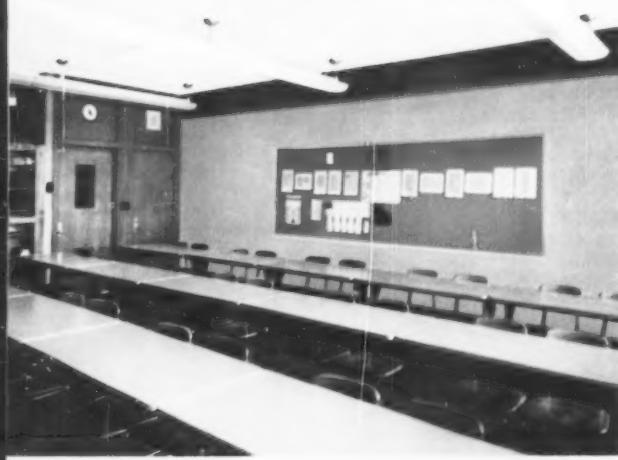
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COLOR DYNAMICS offers a wide choice of effective color combinations for auditoriums. In this room a color plan of bright, pleasing hues provides a welcome psychological change from the quiet, calm colors preferred for academic classrooms.

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The warm color in this modern study room was chosen to counteract the effect of harsh natural light from the north. This hue also aids in distributing reflected light.

Modern painting system improves pupils' work and study habits and efficiency of teachers

Educators in hundreds of schools and colleges all over the country are now using Pittsburgh's system of COLOR DYNAMICS to select colors for school rooms. They have learned that this method of painting is helpful in improving the work and study habits of pupils and the efficiency of teaching staffs.

• **With COLOR DYNAMICS** you choose colors to suit the design and lighting of every school area. You give proper consideration to the ages of students and the work they do.



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PITTSBURGH PLATE

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DYNAMICS[®]

accurately for every type of classroom

• **Gloomy rooms** are transformed into pleasant, cheerful study areas. Cool relief is painted into rooms that face the afternoon sun. Small, stuffy rooms are made to seem spacious and airy.

• **Eye strain is reduced** and concentration is stimulated. Such improvement enhances the pride pupils and teachers take in their environment and this often helps to discourage vandalism and simplify housekeeping. Try COLOR DYNAMICS in your school next time you paint. You can get all these added benefits without paying more than conventional maintenance painting costs.

We'll prepare a special color plan of your school—FREE!

• We'll be glad to send you free a fully illustrated book which explains what COLOR DYNAMICS is and how to apply it most advantageously. Better still, we'll submit a planned color study of your entire school, or any part of it, without cost or obligation. Call your nearest Pittsburgh Plate Glass Company and arrange to have a representative see you at your convenience. Or mail this coupon.

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When you plan to use educational television . . .

**the ELECTRON OPEN-CIRCUIT SYSTEM CAN
REACH ALL SCHOOLS IN YOUR DISTRICT
WITH ON-THE-AIR PROGRAMS**

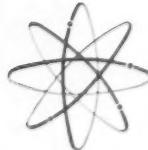
If you have two or more schools in your district, *open-circuit television* can be the answer to reaching all of them from one location with your programs of televised instruction. Even private households in your community can receive these programs.

With Electron Corporation's *open-circuit television system*, you utilize the educational channel assigned to your community by the Federal Communications Commission. You broadcast "on the air" over an Ultra High Frequency (UHF) channel. No expensive coaxial cable is required to connect one school to another for TV. Both live and film programs can be transmitted.

Electron Corporation's *instructional television broadcast station* provides all the necessary equipment control board, transmitter, cameras. And Electron equipment is built for easy use, durability, and to give you utmost versatility in your TV instruction. Electron Corporation will give you all the counsel you need to install an educational television system in your district.

F.C.C. permits for an *open-circuit television system* in your district should be readily available.

The Richardson, Texas school district is one already employing *on-the-air television* at a cost comparable to one classroom. You may find this system best for your district, too. For more information about how your district, even your entire community, could utilize *open-circuit television* for classroom broadcasting, please contact



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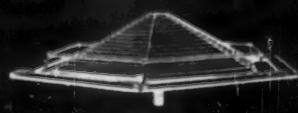


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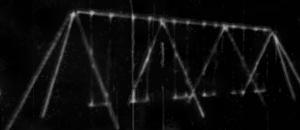




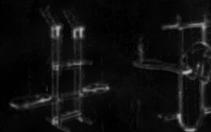
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Rugged Heavy Duty Swing—triangular end pipes plus center pipe supports.



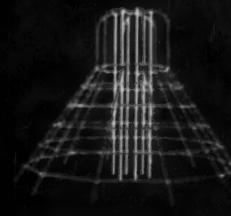
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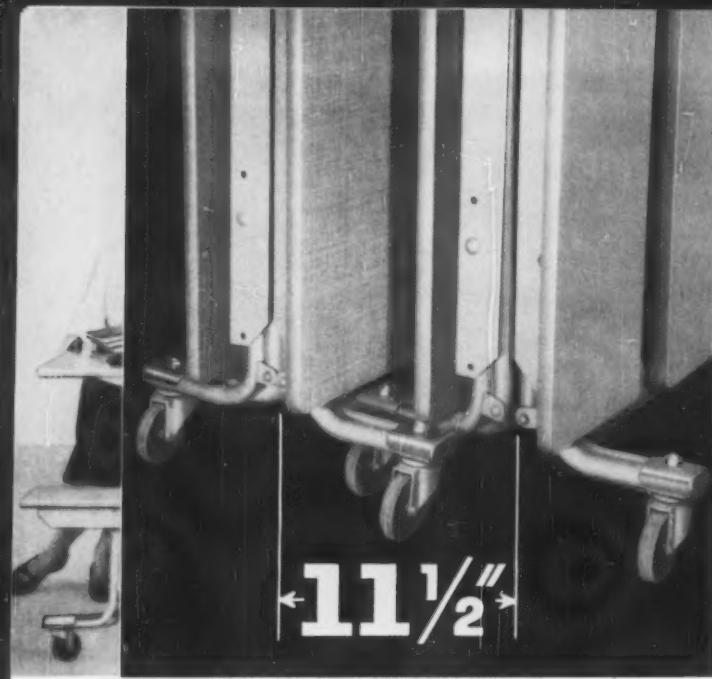
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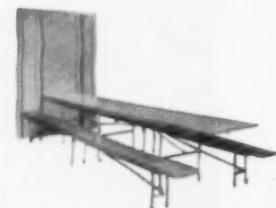
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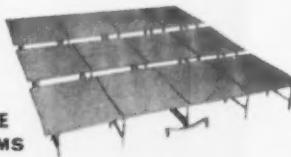
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with or without benches



PORTABLE
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LOOKING FORWARD

Let's Reexamine the Freedom To Teach

FOR the good of the schools, should teachers be denied academic freedom?

This question is prompted by the recent action of the trustees of the University of Illinois who—for the good of the university—sustained their dismissal of the biology instructor who publicly advocated premarital sexual relations.

Here is a saga that challenges a lot of stereotyped thinking. Because this case involves virtually all of the factors in any discussion of academic freedom and freedom to teach, we shall review the evidence and offer some conclusions.

The story begins on March 18, 1960, when Leo F. Koch, assistant professor of biology at the University of Illinois, had a letter published in the student newspaper, the *Daily Illini*. In this letter, Professor Koch "criticized current social attitudes concerning sex, denounced those who hold them, and urged condonation of sexual intercourse among those sufficiently mature to engage in it without social consequences and without violating their own codes of morality and ethics." (This is quoted from the report of the University's senate committee on academic freedom.)

"OFFENSIVE AND REPUGNANT"

Publicity about this letter hit the front pages of newspapers across the nation. Public protest accumulated. President David D. Henry relieved Dr. Koch of his teaching assignments and recommended to the board of trustees that his appointment "be terminated at the end of the current academic year."

In his letter to the dean of the College of Liberal Arts and Sciences, directing that Professor Koch be relieved of his duties, President Henry said:

"With you, I consider Professor Koch's letter a grave breach of academic responsibility. The views expressed are offensive and repugnant, contrary to commonly accepted standards of morality, and their public espousal may be interpreted as encouragement of immoral behavior. It is clear that Mr. Koch's conduct has been prejudicial to the best interests of the University."

In his letter to Dr. Koch on April 11, Dean Lyle H. Lanier of the College of Liberal Arts and Sciences expressed what subsequently is voiced again and again by various agencies of the University, namely, that the University "in no sense would deny the right of a faculty member to criticize the American sexual

mores, provided that the subject were treated in a spirit of serious, reasoned inquiry commensurate with its importance as a social problem." The dean then informed Dr. Koch that "unfortunately the committee could not feel that your letter measured up even to minimal standards in these respects."

The consequence of these letters brought demonstrations of sympathy and approval for Dr. Koch on the part of some students and faculty members.

On April 18, Professor Koch requested and was granted a hearing before the University's Urbana-Champaign Senate Committee on Academic Freedom.

This committee, reporting on May 13, agreed that "Professor Koch's letter did constitute a breach of academic and professional responsibility. The letter is not a reasoned, detached document marshalling evidence or reason in support of a view held by the writer. It is rather an impassioned message in which, by overstatement and ridicule, the writer denounced society as depraved, condemns moral standards derived from the Christian code of ethics as hypocritical and inhumane, and castigates those who might disagree with his conclusions as outrageously ignorant. The letter shows a lack of restraint of expression and disrespect for the opinions of others, which is in violation of the canons of academic responsibility."

URGES REPRIMAND, NOT DISMISSAL

However, the committee objected to the procedures used by the administration in dealing with the biology instructor. It recommended that "Professor Koch be reprimanded for his action and admonished to act in keeping with the dignity and responsibility of a scholar, but not be discharged." It also proposed that an accused faculty member be given "an adequate opportunity to defend himself before a properly elected committee of his peers prior to any suspension, and that the University administration go on record that 'expression of view, however, contrary to prevailing opinions' is not in itself 'a violation of academic responsibility, provided it is made in conformity with the legal and statutory restraints imposed on a faculty member as a citizen, a teacher, and a scholar."

The official hearing on the case by the board of trustees of the University took place on June 14.

In his statement to the trustees, the president defended his administrative procedures and contended

that Mr. Koch's dismissal "constitutes no infringement of academic freedom." Said President Henry:

"What may be regarded as incitement to or condonation of immoral conduct cannot, under the pretext of social criticism, be treated merely as a presentation of an unorthodox point of view or an intellectual exercise in philosophy. . . . Academic freedom is derived from the consent of the public and the common law governing educational enterprise. . . . Should the University of Illinois appear to condone, by its silence or by Mr. Koch's continued employment, the infraction of the moral code inherent in his behavior, academic freedom at this institution would be injured beyond repair. Responsibility is the core not the curtailment of freedom."

"HARMFUL TO BEST INTERESTS OF THE UNIVERSITY"

The conclusions of the board of trustees, expressed on June 14, included the following:

1. "The tone, language, and content of Assistant Professor Koch's letter . . . constituted a grave breach of his academic and professional responsibility and duty to the University of Illinois, the students attending the University, and the citizens of the state of Illinois."

2. Dr. Koch "exceeded the limits of academic freedom granted him by the University of Illinois statutes" and his conduct "was clearly harmful and greatly prejudicial to the best interests of the University of Illinois."

3. "The sexual practices and conduct publicly condoned, espoused, and encouraged" by Dr. Koch "were then and are now purely contrary to commonly accepted standards of morality" and contrary to public policy.

4. The facts "warrant and justify his suspension and constitute just and proper cause" for the termination of his contract (as of Aug. 31, 1960).

The trustees recognized the importance of academic freedom and expressed an earnest "desire to maintain and keep it unimpaired." They said: "We do not condemn Assistant Professor Koch's action . . . merely because he expressed in his letter views contrary to commonly accepted beliefs and standards. We condemn it because of the manner in which he expressed those views in his letter. We do not consider that letter as a 'responsible' and proper expression of the views stated in it."

But the story does not end here. During the summer session at the University the action taken against Dr. Koch was widely debated. Two hundred twenty-nine members of the summer faculty sent an open letter of protest to the board of trustees on July 16. The board acted on that letter on September 21 by unanimously approving the policies previously expressed.

NO JOB; PLANS COURT APPEAL

Interviewed by a reporter for the *Chicago's American* on September 23, Professor Koch was asked whether he would do the same thing if "he had it to do over again." "I don't know," he is alleged to have replied. "I just don't know. Probably not."

Dr. Koch said he plans a court appeal and that he is trying to support his family now by writing and lecturing. He told the reporter he hasn't had a "nibble" for a teaching job.

The same newspaper editorializes: "The board's decision draws a needed distinction between advocating unpopular views—which is everyone's right—and abusing a position of authority. Professor Koch's words could not be considered merely a viewpoint advanced for calm discussion; he spoke as a married man addressing unmarried students, and regardless of his intentions, the effect could not have been other than inciting them to disregard laws of morality."

• • •

HOW do these history making decisions of the trustees and president of the University of Illinois find acceptance (or rejection) at the bar of public and professional opinion? To answer this question, we perused the literature of the field, looking for statements of philosophy that seemed to have a direct bearing upon the Koch case.

WHAT IS "ACADEMIC FREEDOM"?

First of all, we looked for a definition that expresses the principle of *absolute* academic freedom, which seems to be the leitmotif of this discussion. The theory is clearly stated by Francois Condorcet as he reflects French thinking in the Eighteenth Century. He argues: "Since truth alone is useful, since every error is an evil, by what right would any power, whatever it be, dare to determine wherein lies truth, wherein lies error? Besides, any power which would forbid the teaching of an opinion contrary to that which has served as a basis for the established laws would attack directly the freedom of thought, would frustrate the aim of every social institution: the perfecting of the laws, which is the necessary consequence of the combat of opinions and the progress of knowledge."

But is the teacher who exercises unrestrained freedom of speech completely without responsibility to society? Did Mr. Koch have a moral obligation to the community and to the university?

Overwhelmingly, the philosophy of religion holds that all freedom is subject to civil and moral laws. In this instance, we believe all Christian faiths would agree with the statement of Pope Leo XIII a score of years ago:

"The true liberty of human society does not consist in every man doing what he pleases, for this would simply end in turmoil and confusion, and bring on the overthrow of the state; but rather in this, that through the injunctions of the civil law all may more easily conform to the prescriptions of the eternal law. . . . Wherefore, this liberty [the freedom to teach whatever one pleases], in order that it may deserve the name, must be kept within certain limits, lest the office of teaching be turned with impunity into an instrument

¹Condorcet, Francois: Report on the General Organization of Public Instruction, in F. de la Fontainerie, French Liberalism and Education in the Eighteenth Century. New York: McGraw-Hill Book Co., Inc., 1932. Pp. 374-5.

of corruption."¹ This is somewhat the accusation against Professor Koch.

This same concern for the consequences of what one teaches is expressed from the point of the educator by John K. Ryan, who writes:

"Error has no rights. To teach in the classroom or elsewhere what one knows to be false is to violate the dignity of one's nature as a man and to destroy the special virtue that belongs to the teacher. To put forth mere personal opinion as final doctrine can amount in certain instances to the same thing. To do this is not to exercise academic freedom, but rather to abuse it and to work toward its destruction. Upon the teacher, even more than upon other men, rests an obligation to tell the truth. This obligation grows with the weight of the subject that he teaches and with the consequences that his words may have for his students and for society."²

THE STATE MUST PROTECT THE SCHOOL

In this responsibility the state also has an obligation, writes Ernest N. Henderson:

"Genuine academic freedom requires that the state should protect the school in determining the content and method of education. Without this privilege and responsibility, academic freedom is left ineffectual."³

This point of view fully vindicates the trustees of the University of Illinois in their interpretation of their function and authority.

Was Professor Koch's conduct really a case of academic freedom, or rather the question of personal privilege? A sharp distinction is made by A. Lawrence Lowell, who maintains:

"The right of a professor to express his views without restraint on matters lying outside the sphere of his professorship . . . is not a question of academic freedom in its true sense, but of the personal liberty of the citizen. . . . His right to speak about a subject on which he is not an authority is simply the right of any other man, and the question is simply whether the university or college by employing him as a professor acquires a right to restrict his freedom as a citizen."⁴

Was the biology instructor's letter merely an example of intolerance? This possible interpretation is expressed by Howard K. Beale, who writes:

"The teacher not only owes obligations to society, to students, and to his own professional standards, but to the community in which he lives and works. . . . To have an unsympathetic teacher scoff at all the community's deepest convictions is not to create freedom but to transform one brand of intolerance into another."⁵

¹Pope Leo XIII: *Libertas Praestantissimum*, quoted in John A. Ryan and Francis J. Boland, *Catholic Principles of Politics*, New York: Macmillan Co., 1940, pp. 169-78.

²Ryan, John K.: *Truth and Freedom*, *Journal of Higher Education* 20:350-54 (October) 1949.

³Henderson, Ernest N.: *A Textbook in the Principles of Education*, New York: Macmillan Co., 1910, pp. 459-62.

⁴Lowell, A. Lawrence: *At War With Academic Traditions in America*, Cambridge, Mass.: Harvard University Press, 1934, pp. 267-71.

⁵Beale, Howard K.: *Are American Teachers Free?* New York: Charles Scribner's Sons, 1936, pp. 767 & 68.

How do these judgments apply to freedom to teach in elementary and secondary schools?

Freedom to express personal opinions has greater latitude on a college campus than in the public schools. This distinction is developed by V. T. Thayer in his recent book. He writes:

"Freedom to teach, as freedom in other areas, must be a *responsible* freedom, and in no way implies a freedom of an adult to decide at will the pattern he would give to a growing mind. . . . An instructor's tender concern for the quality of his influence upon the young (particularly in the elementary and secondary school) often renders impossible a consistent and clean-cut distinction between his functions as *citizen* and his functions as teacher. . . . Nor is the role of an instructor of boys and girls at the hero worship stage identical with that of a college professor. . . . The activities and behavior of the teacher outside as well as within the classroom and school carry a different moral at different age levels and cannot be a matter of indifference either to the instructor or to those responsible for his selection and retention."⁶

• • •

ORDINARILY, an editorial of this length is not good publishing policy. But the underlying issue here is of such great significance to all public education that we have taken the space to document the key facts and points of view.

The University has official policies and procedures which Professor Koch violated. We wonder whether the majority of our public school systems have similar policies or guides for the classroom teacher.

Surely, the classroom teacher is entitled to know the attitude of the administration, the school board, and the community toward his freedom to teach. Even more important, the teacher should have a part in developing a philosophy and a code for academic freedom, especially as it applies to his school and his teaching position.

FOR THE GOOD OF ALL LEARNING

Academic freedom for a teacher exists in reality only as it is properly related to his professional responsibility. These concomitants include: (1) recognition of his responsibility for the welfare of others (such as the immature child), (2) observance of accepted moral and civic laws, (3) adequate authority and scholarly procedure in the presentation of any point of view contrary to accepted standards.

The Koch case at the University of Illinois has defined the issues. The decision of the trustees was more than for the good of the University — it was for the ultimate good of *all* learning.

⁶Thayer, V. T.: *The Role of the School in American Society*, New York: Dodd, Mead and Co., 1960, pp. 450-51.

The Editor

Donna and Ethel Make 117,718 Homeless; Schools Provide 80 per Cent of Disaster Shelters

SCHOOLS provided 80 per cent of the shelters set up in the wake of the Donna and Ethel hurricanes in early September.

During the peak of the storms, 117,718 persons sought emergency care in 961 such shelters, and the Red Cross estimates that nearly 800 of these shelters were schools. Disaster committees utilized school gymnasiums for setting up cots and the school cafeterias for mass feeding.

The twin hurricanes swept a 50 mile wide path — sometimes at speeds in excess of 150 miles an hour. They battered more than 250 cities and towns along a 5000 mile course from the Atlantic to New Orleans and from Florida to the Canadian border. In the United States more than 20 deaths were reported. Injuries and/or losses were sustained by more than 50,000 families.

Florida was the state hardest hit, with the greatest damage in the Keys area. At Titusville an elementary school was partially destroyed. Donna ripped the roof from the new Arcadia Memorial High School auditorium where 172 families were being housed and fed. A woman assisting in the school shelter at Marathon suffered serious leg lacerations when part of the roof blew off. A baby was born in Miami's Edison High School.

Horace O'Bryant, superintendent of schools in Monroe County, Florida, reports that five schools in Key West were used as shelters and feeding stations. These operations were part of the accommodations provided for 3000 residents of a low lying, 30 block area that officials had ordered evacuated. At Tabanier schools were used as feeding stations and Red Cross headquarters.

In other coastal states, too, schools were serving evacuees. At Stephen Decatur High School in Ocean City, Md., more than 1500 persons sprawled on wrestling mats in the gymnasium, along the corridor walls, and on benches of the cafeteria. School personnel and volunteers served food in the cafeteria from 3 a.m. to 1:30 p.m., September 12.

Schools were utilized for shelters near the resort areas of Rehoboth Beach, Bethany Beach, and Fenwick Island, Del. In Norfolk, Va., 13 schools were used similarly, and shelters were opened for 2500 in 10 public schools and one parochial school in Biloxi, Miss. Hurricane refugees brought in from the marshlands were bedded down for the night at the high school in Lockport, La., about 35 miles from New Orleans.

Affected by the hurricanes, too, were Alabama, Georgia and the Carolinas, particularly on the outer banks and near-by mainland sections, and states from the Virginia line northward, including New Jersey, New York, Rhode Island, Maine and Massachusetts.

It is estimated that in addition to the 117,718 persons served, some 250,000 fled from their coastal homes to find refuge with relatives and friends. Disruption in communication and transportation served to disrupt, directly or indirectly, the lives of some 25 million Americans in 17 states.

Gen. Alfred M. Gruenther, president of the American National Red Cross, the nation's official disaster relief agency, stated that his agency expects to expend approximately \$3.5 million to help these families bring their homes and lives back to normal.

Photo by Billy Quave, Biloxi/Gulfport Daily Herald



AT WARNING of Hurricane Ethel
the Rev. Marshall Fletcher, 78, was
taken to the Harry T. Howard Ele-
mentary School No. 2 in Biloxi, Miss.

Schools

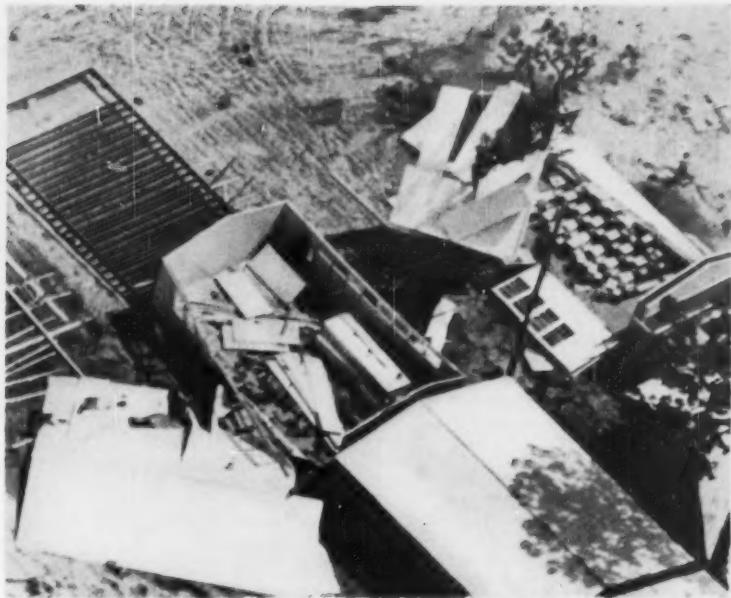
A HURRICANE, tornado, flood or other type of natural disaster could strike your community just as easily as any one of the 300 or more other American cities and towns that suffer severely each year from such destructive forces.

One of the first steps in any disaster plan is the selection of buildings that can be converted easily into temporary shelters to house the families forced to flee from their homes. Experience has proved that school buildings are suitable for this purpose. They not only have gymnasiums and other rooms that can be converted quickly into dormitories, but also are usually equipped with a lunchroom, a kitchen, and an experienced staff skilled at feeding a large number of people in a short time.

With these vital factors in mind, local Red Cross chapter disaster com-



Ola Mae Melvin, a Red Cross worker, talks with the pastor after he has been settled comfortably in a bed at the Howard school shelter.



U.P.I. Telephoto

WINDS from Hurricane Donna partially destroyed Titusville Elementary School in Titusville, Fla., early on September 11. A portion of the school is shown above. Notice that the desks still remain in position even though the walls and roof of the classroom (at right) were demolished.

Can Plan for Disaster Service

mittees throughout the nation frequently make arrangements with school superintendents to use the buildings before a disaster strikes. This planning gives tremendous rewards. In recent years schools in such diverse locations as Louisiana, Connecticut, California, Ohio and Oklahoma have provided temporary havens for disaster victims.

Schools generally are used as shelters for about one week, although it may be longer. And the number of persons sheltered often runs into the hundreds. Usually, cots are set up in the gymnasium or on the stage of the school auditorium. Special facilities such as an infirmary, quarters for infants, tiny children or the very old, and playrooms and supplies are established in classrooms, locker rooms, or school storerooms.

The victims are fed in the school

cafeteria by the lunchroom staffs, augmented by other Red Cross volunteer workers. In providing mass care, the Red Cross tries to avoid disrupting school operations. However, disasters large enough to require mass care shelters usually necessitate the closing of schools. When most of the refugees are permanently or temporarily rehoused, those remaining generally are moved to smaller quarters and the school buildings revert to their normal use.

Why schools are suitable shelters. Schools are chosen because they usually fulfill these basic requirements:

1. A safe and healthful location away from the danger area.
2. A structurally sound building with safeguards against other hazards.
3. Suitable space for sleeping

DOROTHY L. BOVEE
Food and Nutrition Consultant
American National Red Cross

and

JOHN E. HOGAN
Administrative Assistant to the
National Director, Disaster Services
American National Red Cross

Photo by Billy Quave, Biloxi-Gulfport Daily Herald



UNSHeltered? Against background of stage, these children, evacuated on threat of Hurricane Ethel, bed down at Howard Elementary School No. 2.

Wide World Photos



HURRICANE evacuees prepare to spend night in a high school gymnasium in Lockport, La. The people shown were evacuated from marshlands on the Louisiana coast, with the approach of Hurricane Ethel.

quarters, offices, an infirmary, and storeroom.

4. An adequate supply of safe water for drinking and for other purposes.
5. Adequate heating and lighting equipment.
6. Provision for cooking, serving and storing food.
7. Toilet and bathing facilities.
8. Adequate fire protection.
9. Building accessible to transportation.

School administrators usually are eager to cooperate in making their buildings available in the event of a disaster. They realize that the school, like the church and the hospital, is

Photo by Billy Quave, Biloxi-Gulfport Daily Herald



FAMILIES find shelter from Hurricane Ethel in the Howard School building. The persons shown, including two in wheel chairs, relax and converse before bedtime.

BY HUNDREDS, residents of Key West, Fla., left their homes on September 8 as Hurricane Donna swept near the Florida Keys. A group of women and children (right) prepare to spend the night in school building.



U.P.I. Telephoto

a center toward which people instinctively turn when they are in need.

When disaster strikes, everyone wants to help. The community always can count on a ready response from individuals and organizations wanting to volunteer their services. They recruit themselves. When all of these helpful agencies try to operate spontaneously and independently, the result may be confusion, waste and duplication. Thus over-all direction and coordination of the community effort are needed.

Committee makes local plans. Red Cross chapters throughout the coun-

try are responsible for the development of a program that provides for the needs of disaster-affected families. The chapter works through local community leaders operating as a volunteer disaster committee. This committee is responsible for developing local plans for mass shelter, feeding and medical and nursing care. It also is responsible for interrelating these plans with those of city and county governments and other local agencies, and with adjacent communities for purposes of mutual aid.

The responsibility of caring for individuals and families in natural disasters was first placed legally upon the Red Cross in its congressional

charter, granted in 1905. Through Public Law 875, the Congress, in authorizing federal assistance during major natural disasters, provides for closest cooperation with the American Red Cross. This law spells out the essential difference between the disaster relief provided by the Red Cross with voluntary funds and the relief provided by agencies of the government operating with appropriated funds. The Red Cross and government together form a rather neat team in meeting the needs of disaster stricken communities.

The task of the Red Cross is to deal with *human needs* — to help people who need immediate shelter, food, clothing and medical, nursing and hospital care — and to develop and implement rehabilitation plans to help families regain the productive and responsible place in community life that they may have lost as a result of disaster.

Government restores public facilities. The task of government is directed mainly to the *protection* of life, property and public health and the *restoration* of public facilities — rebuilding and repair of roads, bridges, public buildings, and other public services.

Disaster relief has two phases: (1) emergency relief, when the immediate needs of disaster sufferers are given priority, and (2) family rehabilitation assistance, when help to families in returning to normal living is given individualized consideration.

It is the first phase, emergency re-

lief in a disaster, that may involve the use of school facilities for mass shelter and feeding purposes.

At the outset the emergency-stricken community has only its own local resources with which to work. Thus in a case where a school is being used as a temporary shelter, the feeding of disaster victims probably would start with the use of food supplies already on hand, supplemented by local purchases. When such supplies or other school properties are used, the Red Cross ensures that they will be replaced or returned at the end of the operation. When a school uses federal school lunch program supplies, these are replaced under the program of the United States Department of Agriculture, which provides for the allotment of surplus foods for disaster purposes.

Red Cross, school work hand-in-hand. The Red Cross does not just step in and take over a school in the event of a disaster. It works hand-in-hand with the community's educational officials and the school staff in preparedness and relief activities. The Red Cross thus welcomes the services of the cafeteria staff where possible and makes sure that it receives all necessary assistance. If, however, the cafeteria staff is not available, volunteer workers could be assigned by the Red Cross to serve food.

While the school usually is needed only during the emergency phase, the school administrator may continue to be needed as an adviser for family rehabilitation. The Red Cross stays on

the job to administer this family rehabilitation program, which involves meeting disaster-caused needs for the reestablishment of homes. When resources available to the family are inadequate for such recovery, the Red Cross may provide funds for assistance.

The casework procedure that is used in determining the rehabilitation plan for each family is followed by a confidential review of the plan with an advisory committee made up of responsible local citizens. School officials often serve on these advisory committees.

Community leadership, resources are needed. Disaster is the community's business. Your Red Cross chapter is ready to swing into action immediately to do its part should catastrophe strike. But it can't do the job alone. It needs community leadership and existing community resources. The Red Cross' job is to harness those resources into an effective program of assistance. What it asks in return is simply close cooperation to help the victims return to their normal way of life quickly.

We suggest that school administrators contact their Red Cross chapter and city government to see what planning has been done. If no effective plan has been worked out for a community, the school administrator can take the lead. If a community is hit, school leadership and school facilities will be among the resources of first importance on the road back to recovery. ■

American Red Cross Photo by Shere



FLOOD VICTIMS received a hot meal in the Red Cross shelter set up at Central High School, Columbus, Ohio, on Jan. 23, 1959. Food was served by the school cafeteria staff and Red Cross canteen workers.

What Can We Do for the 'Trainables'?

Many children with I.Q.'s below 50 have some capabilities. For these, our overcrowded institutions for the feeble-minded aren't the answer

Based on an interview with **SAMUEL A. KIRK**

Director, Institute for Research
on Exceptional Children
University of Illinois, Urbana

by **Mildred Whitcomb**

BEING dumped into the lap of the reluctant school administrator is a new minority group, the TMR's (trainable mentally retarded).

Under heavy parental prodding, a few public schools as long ago as 1900 began to admit to special classes the EMR's (educable mentally retarded). This program is now widespread and enjoys substantial state subsidies.

Only within the last 10 years have distraught parents, two by two, begun to insist that the local schools assume a part of the burden of caring for and teaching their severely retarded offspring.

These unlucky little boys and girls — victims of brain injury, Mongolian idiocy, biochemical disabilities, and the like — may have I.Q.'s ranging from 25 or 30 to 50. Their names may be years down on the waiting list of a state institution for the



Dr. Samuel A. Kirk gives child the mirror reading test. Author of more than 60 books, monographs and articles on the exceptional child, Dr. Kirk is a former president of the International Council for Exceptional Children and a former vice president of the American Association on Mental Deficiency.

feeble-minded, where, the chances are, they will get little more than minimum custodial care after they arrive. Yet these children do possess some capabilities for self-care, for social adjustment, and even for economic usefulness in the home or in a sheltered environment. Eighteen or more states now subsidize TMR classes.

For Cities of Less Than 50,000. The school administrator today may be dodging the responsibility of trying to train the merely trainables for somewhat obvious reasons, each of which is valid: (1) He probably lacks the space; (2) he certainly lacks a choice of specially trained teachers, and (3) he is likely to be short on know-how.

If he heads a school system in a town or district with a population of less than 50,000, he cannot undertake such a program except in combination with adjacent communities. Per thousand school population there is only one child, possibly two, in this middle category of mental deficiency. What with selective admissions, transportation arrangements, and other difficulties, he couldn't fill two small classes. The experts consider segregation into two classrooms necessary. A logical break is between

the 6 to 11 year old group and the 11 to 16 year old group. Either a cooperative program with near-by school systems or a totally new concept of handling the retarded is all the rural or smaller town superintendent can offer the parents who knock at his door. Some of the newer concepts will be discussed later.

For Cities of More Than 50,000. Now let us assume that the school system is sizable, parental pressure keeps building up, and state aid is available to meet the added costs of the program. For sound reasons, the superintendent may still hesitate before instituting such classes. For not only may he lack the classroom space, trained teachers, and specific know-how, but he may have spent recent free evenings reading the findings of research on the mentally retarded. From the experts he has learned that such aid as the public school can give the TMR's is only of temporary value to either youngsters or their parents.

Studies made by a foremost authority, Samuel A. Kirk, director of the Institute for Research on Exceptional Children at the University of Illinois, Urbana, indicate that the TMR's constitute a problem too big for the

schools alone. These young people are quite as much a public health and welfare responsibility as they are a public instruction responsibility. Nothing short of cradle-to-grave planning will suffice.

For the public school will, at 16 or other legal school leaving age, return this deficient youngster to his family for round-the-clock living. Now a big fellow, he will pass endless days staring out the window or drooling dully over TV comics or Westerns, all unconsciously waiting out the months or years until someone persuades his parents to have him committed.

England Has Good Program. So far as trainables go — but not the educables — some European countries, notably England and The Netherlands, are viewing the problem in wider perspective than are our 50 United States. Herbert Goldstein, associate professor at the Illinois Institute for Research on Exceptional Children, recently returned from an international conference of teachers of backward children held in London. While there he visited several experimental centers, and came back with the Illinois Institute's opinions reinforced.

In England the mentally retarded come under the administration of the County Health Authority. This tax-supported agency assumes full responsibility for training all persons

**A cradle-to-grave program
for the trainables is the logical course.
Dr. Kirk proposes a Community Center,
including a day school unit
operated by the local public schools**

with I.Q.'s under 50. From the time the child comes to the attention of the Authority until his obituary notice appears in the papers, he is under what Dr. Goldstein describes as "a tight social service network."

Station 1 in the network is a special Training Center built and equipped by the county, which employs supervisors, teachers, matrons, cooks and maintenance personnel to staff it. The county also provides diagnostic and ancillary services to families or foster parents. It buys or leases buses to transport the children to and from the center. If one or both parents die, the county finds and pays for foster home care — indefinitely.

Parents are induced to send a retarded child to the training center when he reaches age 3. Since few trainables so young are toilet-trained, one or sometimes two full-time matrons assist the teacher, looking after the cleanliness of the children. A class accommodates no more than eight or 10.

As Dr. Goldstein watched a typical class of trainables, he observed no inactivity. The children were "immersed in sound and action and were encouraged to react to the music or action even if only to smile and clap hands." Games were coordinated with rhythmic body exercises and dances.

At 16, these English children are examined for admission to an Occupational Center, also operated by

the County Health Authority. The center trains the adolescents in simple skills; later, they, as adults, work there at contracted-for tasks and get paid "commensurate with their productivity."

Another station in the English social service network — and a highly important one — is the special Teacher Training Center. Teachers for TMR's have a lesser program than those who will teach EMR's. A two-year program, it is tuition free. Most of the trainees Dr. Goldstein saw were around 18 years old. They attend lectures given by university and training center personnel, and they observe and do practice teaching, rotating from one training center to another.

Teacher Prerequisites Too High. The reason the English system has been described so fully is that it is a pattern we might consider. It is akin to Dr. Kirk's own proposal for a total program for the retarded, shown in the chart on page 74. In our country, to teach in the public schools a person must have a state certificate, plus perhaps another year of specialized training in working with the mentally retarded. Where are such teachers to be found, and how many exist?

Dr. Kirk declares that a teacher's certificate for elementary school teaching is neither sufficient nor applicable. Special training is necessary.

An important function of the Institute for Research on Exceptional Children at Illinois is its doctoral program for training specialists. Some 37 specialists have emerged from the Institute, many of whom are now heading special research and teacher training programs in other universities, even in other countries.

During their graduate study, these men and women do research work on various deviating children (also the blind, deaf, cerebral palsied, the gifted) and usually spend time in the state institutions and the public schools conducting studies. The Illinois approach is interdisciplinary — psychology, sociology, education.

As the direct result of just one of Dr. Kirk's projects, described in "Early Education of the Mentally Retarded," a book published in 1958, six of one group of 15 institutionalized children advanced far enough mentally to be permanently paroled. In addition to these children being restored to the sheltering arms of their parents, the state has been saved \$50,000 per child for their lifetime care.

From Every Walk of Life. "Part of mental retardation is the result of the child's cultural environment," Dr. Kirk asserts. "It simply is not true that a culturally barren home is better than some other provision that might be made for a retarded child. Often the youngster will perk up

when he is put into a more stimulating foster home.

"There's nothing like a special preschool in the community or in an institution to develop the retarded child. In fact, many children now in special classes at public school could have entered regular classes had they received intensive education and better home opportunities at an early age," he declares.

Not all school administrators may be aware of the fact that the trainables do not spring from the same low socioeconomic group that produces most educables. The EMR's are likely to come from a deprived home environment, where the mother herself is dull or retarded. Often they are illegitimate children. But the TMR's, because their defect results from some anomaly of birth or prenatal development, may come from the home of brilliant or average parents. Indeed, they spring from a true cross section of our society.

Parental Leadership Required. From the more intelligent of these parents may come the leadership that will give America a more effective pro-

gram, a true lifetime program, Dr. Kirk believes.

Learning (and acknowledging) that one's child is severely retarded results first in shock, then in depression and lost time, and finally in insistent pounding on the door of the public school. This is the natural sequence of parental reactions. Gradually the wiser parents emerge from total concern with their own situation to join hands with couples similarly afflicted.

From such shared grief and determination may come the impetus for forming a community preschool and also a community sheltered workshop, to which the youngsters may turn for minimal work skills as they take leave of the public school.

From local parental concern may also come pressure for legislation that could give each state the cradle-to-grave program that mentally retarded status requires. In such an enlarged vision for the future of these unfortunates, the school administrator, as citizen and as educator, will gladly join.

Proposed Community Center. Dr. Kirk's own Community Center pro-

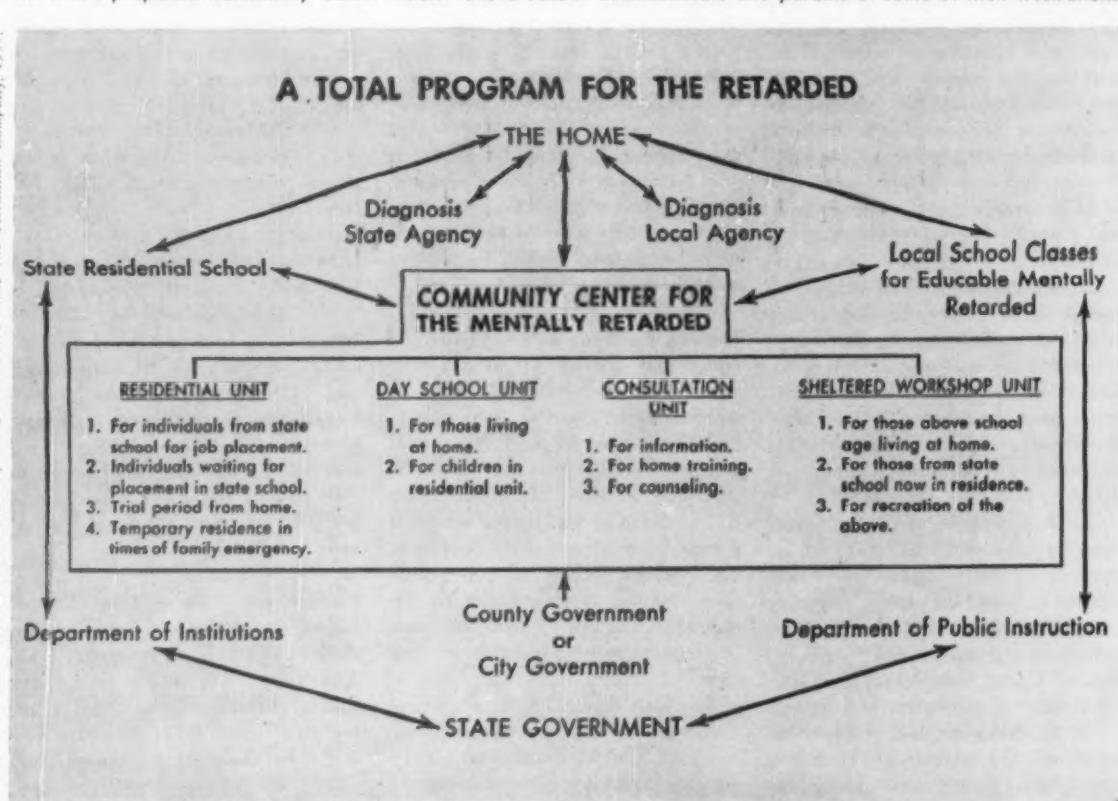
posal, shown in the chart, would relieve both the superintendent of schools and the parents of some of their current frustrations. It would house classes for trainable children outside the school proper, where classroom space is hard to find and where handling both retarded and capable children creates some problems. And since a day school unit at the center would be a part of the local public school system, as are classes for crippled children in hospitals, it would be another step toward serving all the children, as our democratic society demands.

Parents would have two choices: They could send their severely retarded child to a residential unit near home, where they could keep an eye on his progress, or they could send him to day school in the Community Center. A staff of consultants, either on the spot or touring about the state, would advise them as to placement. The residential unit would house no more than 25 children, preferably fewer.

The school administrator and parents would have the further satisfaction (Continued on Page 124)

Dr. Kirk's proposed Community Center would relieve school administrators and parents of some of their frustrations.

From "You and Your Retarded Child" by Kirk, Karnes and Kirk, The Macmillan Company, 1957.



Most Administrators Defend Bible Reading in Public Schools

SHOULD reading the Bible in public school classrooms be permitted is a question on which *all* administrators polled this month by The NATION'S SCHOOLS have an opinion. And three out of four believe that reading verses from "any Christian version" of the Good Book deserves a place in the public school curriculum.

Some of the 72 per cent in favor of the practice advocate it as a means of strengthening and enhancing our democratic heritage. Speaking for this group was an Indiana schoolman: "The reading of the Bible is an obligation to America's budding citizens because our democracy is founded upon the belief that the individual has great integrity. This philosophy is set forth better in the Bible than anywhere else." A Texan went further: "If ever we arrive at the place where the Bible is not permitted in our public schools, we are no better than the Russians!"

Unless Parents Object

Others favoring the practice have this reservation: Let the Bible be read "if there are no objections" — whether from parents, denominational groups, administrators, school boards, or local public opinion. "If parents object, their child might be excused during the reading," offered a New Yorker, while a Mississippi superintendent would draw this line: "If 25 per cent or more parents protest, Bible reading should become an obligation of the home or church."

Another group warned that "sectarian doctrines should not enter into the presentation" (N.C.), while others suggested that the Bible be regarded in public schools as a work of literature or a historical document. "The teaching of U.S. and world history is impossible without frequent reference to the Bible as a historical document," declared a Californian who believes his state to be "much too narrow in

OPINION POLL FINDINGS:

Do you believe that reading from the Bible (any Christian version) — without interpretation or comment — should be permitted in public school classrooms?

Yes . . . 72%

No . . . 28%

Based on a 4 per cent proportional sampling of 16,000 school administrators in continental United States, this survey brought a 49 per cent response.

its tolerance of the use of the Bible" in public schools.

"It might be wise," offered an Iowa schoolman, "if in some localities it [Scripture reading] be restricted to the Old Testament."

When the Bible should be read in schools was the concern of many. Suggestions included: "in special holiday programs at Christmas, Thanksgiving and Easter" (Mo.); "in periodic assembly programs before the student body" (Neb.); "during the opening exercises of the school day" (Utah).

A small group doubted that it was even possible to read the Bible "without interpretation or comment." Asked a Californian: "Would not the selection alone of the passage to be read be interpretation?"

Twenty-eight per cent of the superintendents participating in the poll would *not* permit Bible reading in public school classrooms. A Michigan official stated what others seemed to imply: "Such action invites controversy!"

For a Minnesota administrator "experience indicates that too many teachers are unable to do the reading without commenting or interpreting."

"In our state we are required by law to have Scripture reading," said a schoolman from Arkansas. "If students read," he continued, "it often

becomes mockery. If teachers read, only those verses strongly adhered to by certain sects might be emphasized while other verses might go unnoticed."

Some questioned the value of the practice. "I don't believe that reading the Bible in schools is harmful, but how much help is it? I object because it is a waste of time," stated a New Yorker. Declared one respondent: "To read and read only would serve no purpose whatever."

Bible reading is an area for which one group charged responsibility to the church and the home. According to a Californian, "Bible reading can be handled more logically and effectively in the home and church." An Illinois man added: "The schools are not the dumping grounds for everything."

"I'd rather see a situation of released time whereby a pupil could go to his own church," proposed a superintendent from Michigan.

Only a small group of respondents argued that the reading of the Bible in classrooms is a violation of the separation of church and state doctrine. "I feel that there should be a separation of the functions of church and school, leaving to each its specialty," maintained a California administrator. "Yet they should be supportive of each other," he added. ■

**Part II: Superintendents
Round-Table Discussion Concurs**

Federal Aid:

THIS is the second in a series of superintendents round-table discussions conducted at Little Rock, Ark. Calvin Grieder, who conducts the "Administrator's Clinic" for The Nation's Schools, served as moderator, and Arthur H. Rice, editor, as interrogator. These Arkansas superintendents were participants: Chris D. Corbin, Fort Smith; Hugh L. Mills, Hot Springs; Terrell E. Powell, Little Rock; Garland A. Stubblefield, El Dorado; J. A. Trice, Pine Bluff; Wayne H. White, Fayetteville; F. B. Wright, North Little Rock. Also participating were Forrest Rozzell, executive secretary, state education association, and J. H. Wasson, director of supervision, state department of education. A. W. Ford, state commissioner of education, was host.



Garland A. Stubblefield (left), El Dorado; Hugh L. Mills (center), Hot Springs; Terrell E. Powell, Little Rock.

**At best, N.D.E.A.
is no more
than a stopgap measure**

G. A. STUBBLEFIELD: As I see it, we lack emphasis on the social studies. Our National Defense Education Act emphasizes three fields: science, mathematics and modern foreign languages. As a result a lot of schools are trying to build up those fields, but they are neglecting other things that ought to be taught in the social studies. That's the big danger we're facing. Whether or not there was a definite intention to bypass the social studies when the N.D.E.A. program was set up, I don't know.

CALVIN GRIEDER: I've never heard that interpretation! I thought the idea of making money available for science, mathematics and foreign languages was riding in on the coattails of the so-called national emergency, and that was one way to get the money.

STUBBLEFIELD: I think that is true, possibly, but at the same time it generally is admitted that one of the biggest problems in this country is that we're engaged in a war of minds, not a shooting war. For that reason our national government should be more interested in the social studies field than in anything else — or at least equally interested.

JAMES H. WASSON: Social studies and communications make possible the things that are going to happen in science and other fields. I'm not opposed to the emphasis on science and mathematics, but I do think that attention needs to be given to the whole spectrum, not just two or three fields. Of course, in many fields there is not much equipment involved for which a great deal of money is being spent. But even here there are examples of shortages, and I'm thinking particularly of libraries.

FORREST ROZZELL: As I see it, the N.D.E.A. is a concrete example of the basic problem that we face in America today. As a result of the fears and criticisms engendered by Russian scientific successes, education has been injected into the political arena at the national level. Now, instead of seeking the best advice and counsel possible to interpret the needs of American education in all its aspects, the Congress sought for stopgap measures to answer the criticisms and to compromise with various forces that oppose a sane and sensible policy of federal support.

It is even contended in some quarters that whatever is done ought to be

Don't Let It Unbalance the Curriculum

available to parochial and other private schools as well as to public schools. In the end, Congress compromised with a purely political expedient. As a consequence, I think, they are doing a disservice to American education.

HUGH L. MILLS: Every group needs a pessimist, and that seems to be my role today. I think a basic problem here is that social science is not being taught in the colleges as effectively as in the past. The fundamentals in the field don't seem to be rubbing off on social science teachers of the last few years.

I also see too many people prepared mainly in other fields, with a minor in social studies, who are expected to step in and take over the tremendous responsibility of teaching social studies in our public schools today, and that is a *big* problem. We need well trained people in that field as well as in other fields.

F. B. WRIGHT: The N.D.E.A. was conceived with the very poorest educational objectives in mind. My contention is that somewhere there ought to be money provided for inservice training — for doing something to develop people to handle the program. You can buy a trainload of stuff and still have a poor science, mathematics or foreign language program. That's my chief objection. We've spent a lot of money in North Little Rock, but our emphasis has been on trying to get our people ready to use what they want to buy.

WAYNE H. WHITE: I want to get back to the original question of federal aid and federal control. It seems to me that the biggest danger of federal control of education is through such measures as these by which the curriculum is influenced. I think the N.D.E.A. probably has done more to control the curriculum than anything else the federal government has ever done.

WHITE: I was at a meeting a few months ago where officials of the A.A.S.A. and the U.S. Office of Education spoke. One of the main points that they brought out was the terrific battle the U.S. Office of Education had to fight to keep the whole N.D.E.A. program from being put into the National Science Foundation, bypassing completely the state departments of education.

The only way we can have federal aid without federal control is to grant a lump sum to each state and let the educational authorities in each state determine how they're going to spend it. It shouldn't be earmarked for construction or for teachers' salaries or for anything else.

GRIEDER: What you're talking about, Wayne, is the Udall bill. It's only about four pages long and it provides for just what you have suggested. But is there a Chinaman's chance of getting a bill like that through Congress?

A. W. FORD: The fact is that most congressmen don't want to lose control of the money. They want to be reelected; they like the people to continue to look to them and, regardless of what they tell you back home, your typical congressmen actually don't want to pass legislation in which they are completely removed from the picture.

(Continued on next Page)

**Teachers need
more preparation
in social studies**

John A. Trice (left), Pine Bluff; Chris D. Corbin, Fort Smith.





Wayne H. White, Fayetteville.

Let the states decide
how to spend federal money

EDITOR: I'd like to hear your opinions on this question: Do you favor the principle of earmarking money for teachers' salaries specifically?

WHITE: I'd rather see just a general grant of funds with no earmarking for any specific purposes, but with permission to the states to do as they please.

TERRELL POWELL: I certainly believe that if we get federal aid we should have some of it for teachers' salaries.

GRIEDER: Do you think it should say so in the law?

POWELL: I think that the states should have the option to use the funds where they're most needed. I would not be in favor of earmarking.

MILLS: I wouldn't either. I would be opposed to earmarking.

[At this point there was such a spirited discussion around the table that the men forgot to identify themselves, but the following comments are taken from the record.]

- How about you?
- Well, in the framework of what you're saying now, I'm basically opposed to federal funds that specify you've got to use them for this and this and this. If that's the only choice, of course, I'd have to take it.
- I'm in favor of the federal government's establishing a policy of allocating funds for education to the states, to be used at the discretion of the states. That is the basic principle, I suppose.
- I'm opposed to earmarking, period!
- I favor a national policy set by Congress in which a partnership arrangement among the federal government, the state, and the local community is established on a total basis, with no earmarking.
- I'm for the principle of federal assistance to public education on an equalization basis, but with no earmarking.
- I'm in favor of general aid to education with the right to determine the use of this money left to the states and local districts.
- I'm also opposed to earmarking, and that makes it unanimous, I guess.

ROZZELL: The bill reported out of the House education committee provided for \$325 million annually to be allocated to states and earmarked specifically for school construction. The position of the N.E.A., as I understand it, was that the bill should be amended to provide that funds may be used either for school construction or for teachers' salaries in whatever amounts may be determined at the state and local levels. I decided definitely to support that amendment.

WHITE: If we have to make a choice between no bill at all and a bill that allocates money for school construction, I would say that having aid for school construction is better than no aid at all.

FORD: One of the construction bills in Congress, as I understand it, was a three-year proposal, with provision for mandatory matching by state construction funds during the second and third years. I am opposed to that idea.

If the bill could be amended to the point that state and/or local funds could be used for matching, similar to the way the Smith-Hughes and other acts are set up, I could reluctantly go along with it. But I can't go along with it when it requires that \$3.5 million in Arkansas be taken out of the teachers' salaries fund to match construction funds in the second and third years. There's no other place to get that kind of money, and I'm opposed to it.

ROZZELL: I concur. As far as I'm concerned, if they are going to confine aid to school construction, they can keep it. I think all that will result from it is another stopgap measure where congressmen can talk about what they've done for education. In Arkansas we'd get about \$3.6 million of the \$325 million.



Forrest Rozzell, executive secretary,
Arkansas Education Association.

How could we possibly allocate those funds equitably in Arkansas without creating more problems than they solve?

GRIEDER: Such an allocation for this state would be a feeble gesture, wouldn't it? Now, I was going to ask about a remark made recently that the matching requirement of the N.D.E.A. is really a throwback to an old, discredited concept of some 50 years ago or more: reward for effort. If you don't put up some money, you don't get any aid. Somebody said that only about 70 per cent of Arkansas' due share was being utilized because the state, through the local school district, had put up only 70 per cent of the amount it was required to furnish.

POWELL: Now it works in reverse. The more the local district puts up, the less aid it gets.

WRIGHT: A lot of us can't even spend money up to the limits of our allotment. We'd actually be wasting money if we spent the amounts for which we could qualify.

FORD: With the present small amount provided by Congress, there is going to be even more money than Arkansas districts will be able to match. The state board has set up a policy, on the recommendation of the state department of education (and with the concurrence of the Arkansas Education Association) looking toward local matching, because we just don't have any state funds to match that kind of federal money.

GRIEDER: But it is a reward for effort, isn't it, at least in part?

FORD: Well, it's a reward for effort in that the local district must put up the money.

GRIEDER: But if the district can't put up the money, then it doesn't get any aid.

JOHN A. TRICE: Let's face it. The whole reason for this bill is a reaction to a form of hysteria, and I believe there is a lot of good coming out of this bill and out of the N.D.E.A. For example, there is good in the strengthening of state departments of education and the strengthening of certain fields of study. There's going to be some good in it, but the whole philosophy of it tends to prevent us from getting a real national policy in education, which is what we need.

The principle of equalization must, I think, be applied. For instance, Arkansas ranks about ninth among the states in the support of public education in relation to its ability. Well, somebody ranks 48th, 49th and 50th. We have the same problem in our state among the counties and among the districts, and we have attempted to eliminate that by getting a uniform assessment ratio of 20 per cent. We must think of equalization of effort in relation to ability.

GRIEDER: Someone said, I think it was Wayne White, that if there is money available for construction, it would leave free some local and state money for other things.

TRICE: Not if you had to match federal aid. There are only 10 or 12 states of the 50 that have school construction funds, and that would make the application of the present bill in those states an entirely different thing from its operation in Arkansas.

ROZZELL: My position is this. In Arkansas, we have far better buildings than we have salary schedules. We have far better transportation systems than salary schedules. We have a much greater need for increased revenue for teachers' salaries than for school construction.

With the matching requirements, whether for state or local matching, the money will go to the areas that are able to match. There won't be any reduction in teachers' salaries. Those districts will scrape up the extra money. But this won't have any bearing whatsoever on the general improvement of salary schedules in Arkansas.

TRICE: We have spent more money for construction in Pine Bluff alone in the

It's the
old story of
reward for effort

Let's face it:
Hysteria is
the basis for N.D.E.A.

last three years than the total amount of money allocated to Arkansas by this bill.

GRIEDER: Gentlemen, let's get back to the N.D.E.A. We seem to have got sidetracked to the school construction bill. What do you think about the general effect of the N.D.E.A. at this moment? Do you think it has done more good than harm? Would you like to see it continued or see it ended?

WRIGHT: Even though I object to the way it is applied, I think it is doing a lot of good.

CORBIN: I think it should be ended. I think the harm it will do will overbalance the good. I think it's just a token, anyway, and that it ought to be done away with.

STUBBLEFIELD: I would agree with that, too.

WHITE: I think that as a four-year program it will do a lot of good. But I'd be opposed to it as a permanent program.

WRIGHT: I'm opposed to it as a permanent program.

POWELL: As John Trice said, I think we are getting some good out of it. But if I had that amount of money to spend as I saw fit, I think I could put it to better use.

ROZZELL: I feel like apologizing for having had anything to do with the passage of the act in the first place. I think it has done a disservice to the cause of education in America. It has tended to overemphasize certain aspects of the educational program in the people's minds. It has provided concrete examples of federal control of education. Insofar as the good that is being achieved under the N.D.E.A., I think we could have provided the same good in Arkansas, even from the limited funds that we have, without the N.D.E.A.

GRIEDER: Does anyone wish to express an opinion about the future effects of the act?

FORD: I would want to reserve my opinion as to the future until later, at least for another year. I favor the Udall bill, the principle of which was developed by Congressman Udall of Arizona, Edgar Fuller and the Council of Chief State School Officers. If I become convinced that the N.D.E.A. is harmful to the development of a total approach to the educational program, I definitely will be opposed to its continuance.

However, I do believe that through the N.D.E.A. and the excellent administration it has had in the U.S. Office of Education under Lawrence Derthick, certain gaps in our instructional program are being exposed and are being corrected in large measure. I believe this will spill over into the social studies field and other fields. There is classroom after classroom in which teachers have inadequate materials and supplies. I think that's one of the things wrong with the social studies. There hasn't been any money spent inside the classroom. You give them four walls, a chalkboard, a textbook, and a teacher. I think that the N.D.E.A. is going to do a great deal to show up other needs that must be taken care of.

GRIEDER: Do you mean that you think the N.D.E.A. may have a general elevating effect?

FORD: I don't think there's any question about that, at least so far as pointing out what the situation is. Whether we can get general grants of funds to correct it, I don't know.

CORBIN: It seems to me that it's just utterly absurd to say that a science teacher needs to go to school more than a history or social science teacher. Singling out a particular department and setting it up on a preferred list doesn't make sense to me.

Next month: Foreign Languages in the Elementary School.



Frederick Bruce Wright, North Little Rock.



James H. Wesson, director of supervision, instructional services, Arkansas State Department of Education.



A. W. Ford, state commissioner of education.

THE TOOLS OF EDUCATION

FOLLOWING the tremendously significant research studies made by this columnist on the subjects of paper clips (*The Nation's Schools*, February 1959) and pencils (*The Nation's Schools*, July 1959), there has been an increasing demand for a similar study on other educational tools of paramount necessity to every educator. The ball-point pen ranks first on this list.

A hundred, or even less, perplexing questions have been raised for investigation: Why does the school administrator always wear a dozen ball-points in his pocket when a lesser number should be more than sufficient? Who furnishes the school administrator with the money to conduct the butter tests that guarantee the excellence of these implements? Does this graft come from Communist sources? (A query submitted by the Legion of Book Burners.)

Whatever happened to the surplus hogsheads of ink ordered by the superintendent? (A question from numerous taxpayers' associations.) How can a superintendent tactfully dispose of payola pens from distributors without hurting their (the distributors', not the pens') feelings?

When ball-points refuse to implement, do they create inward psychological tensions or merely muffled curses unsuitable to the high office of school administrator? Is the superintendent a one-capuse administrator, or is he a piggyback?

Such research questions cannot be treated lightly, for they do not differ materially from questions proposed and solved in many doctoral dissertations.

As is the accepted procedure, we will begin with the historical background. Ink probably was discovered in China or India or thereabouts in 1212 B.C. or later. It originally was made of soot and glue, which often appears to be the identical substance now used in ball-point pens.

Later, the ink supply was extracted from cuttlefish, squids or octopuses, depending upon their willingness to cooperate. (Even to this day, many school administrators seem to attract cuttlefish instinctively.)

Originally, ink was withheld from pupils until the fifth grade level because the younger school children insisted on using it for drinking purposes or splattering spots on their attire. To remedy this sloppy situation, the ball-point pen was invented.

Among school administrators, the ball-point pen is used mostly for the following purpose: (1) to decorate (explained



previously), (2) to impress the beholder with the literacy of the holder, (3) to tract and retract when under tension or duress at the P.T.A., (4) to use as a weapon in self-defense, (5) to write lengthy and illegible reminders, (6) to inscribe checks (the latter is not ordinarily a major employment for many superintendents), and (7) to doodle.

The mortality of ball-point pens is distressing. No pen ever loaned to a board member or a visiting fireman has ever been known to be returned.

Ball-points easily develop pernicious anemia or Hodgkin's disease. They do, however, have one great advantage. When the school administrator writes his annual report, there is something about a streaming pen and a gallon jug of ink that makes him violate all the rules of conservation. However, this is not true of ball-point pens, which have a more reasonable terminal point.

Definition

A curriculum optimist is one who votes for the study of Esperanto instead of Latin; a curriculum pessimist is one who advocates the study of Chinese.

REPORT FROM SUGARTOWN

Lay Helpers for the Teacher

MANY STUDENTS of school administration are advocating the increased use of qualified lay helpers to assist overworked teachers. Yet like other miracle drugs, such use may sometimes produce unexpected reactions that are worse than the original disease. This was the case at Sugartown where, because of increasing enrollments and a shrinking budget, we felt that we could increase the effectiveness of the professional teaching staff with a judicious admixture of lay participation.

The Sugartown (population 900) Board of Education really fell for the fallacy that thousands of incipient teachers are going to waste in every community and it would be a profit to them and to the educational budget if they were employed as lay helpers for bank days, assembly programs, rubber and overshoe

overseers, and the thousand and one nonteaching chores which presently inundate the teaching process.

As a lay helper for the music position, we obtained an unusually talented musicologist who was a reader and writer of music and an expert on the metronome. She had failed certification only because she was completely tone deaf, but her enthusiasm lacked naught.

Unfortunately, it centered entirely around the glockenspiel. Within a few weeks the whole community was glockenspiel oriented. Everyone from the tuba player to the kiddie who regularly dropped the cymbals in the kindergarten band was forced to purchase a glockenspiel, an expenditure which fractured the balance of the community and the music budget.

Even at that, one should undoubtedly be grateful to the great god Pan that the old gal had a passion for glockenspiels instead of bass drums, pipe organs, or similar oom-pah-pahs.

A somewhat comparable situation soon arose in the science classes where the lay helper was a locally recognized butterfly collector and fossil hunter. In the first flush of enthusiasm I found myself netted whenever I poked my head out of the office and, in my eagerness to avoid a loss of dignity, I was promptly characterized as an incipient fossil, an accusation which many of my former friends in the community seemed eager to enlarge upon.

Even the rubber and overshoe overseers were a disappointment. They proceeded to rubberize the little ones regardless of the state of the weather and carried their activities to such a peak that we had to provide slickers, ponchos and retreats for every child.

The final blow came when a Lay Helper's Union was organized and picked me for time-and-a-half for all overtime activities. When I turned back the instructional services (including bank days, field trips, and register keepings) to the few regularly trained and certified teachers who were still left, there was great relief among faculty, janitors, parents and all others for whom relief had been sought.



INNER COURT (upper photo) features a sundial at right. The paved area of the court can be used as an outdoor stage. Classroom wings protect the court from strong winds. Roof extensions not only reduce the ravages of weather on exterior walls, but also serve as covers for outside corridors and play areas. . . . **GYM** (lower photo) at Salina Elementary School also serves as the only neighborhood meeting room in the school area. The white tile wainscot contrasts with the wood panel walls and the blue tinted glass windows. The ceiling design is a welcome change from the more usual clutter of open steel trusses and dangling light fixtures.

The Little Things

WHILE the plans for the Salina Elementary School in Saginaw, Mich., were still just a conversation piece, searching questions were posed by the cooperative planning group. What features of the building can help improve instruction? What features of the building will improve the efficiency of teachers? What can be done to make the building easy to operate? What arrangements will best simplify supervision?

And so the story of Salina Elementary School is told not just because the building is beautiful or just because it is new, but because the many hours of thoughtful planning and critical thinking are recorded in the hundreds of little (and big) things that make this school *house* a delightful, livable school *home*. The designers are local architects, Oeming & Waters. The principal of the school, Janie Miner, was chairman of the educational specifications committee.

This new elementary school is not exceptional in size. It has 12 classrooms and two kindergartens; each classroom has 1000 square feet of usable space, and each kindergarten has 1400 square feet of usable space. Furthermore, the site for this school was ordinary — a 5 acre lot, rectangular in shape, and just at flat as any river-bottom land can be.

But the site was planned as carefully as if it were to be a Japanese miniature garden, so that this small school plot now includes: (1) an outdoor area by each classroom; (2) a fenced area for the kindergartners, free of stray dogs and "big kids"; (3) a paved parking lot reserved for teachers; (4) an inner court shielded

That Make a Better School

By RUSSELL E. WILSON

Associate Professor of Education
and Consultant to Bureau of
School Services, University of
Michigan

from strong winds by the classroom wings and developed with paved areas and grass areas (this inner court features seat benches, a daytime telescope, and a sundial. It is located two feet above the playfield elevation so that the paved area of this court can be used as an outdoor stage, while the black topped area of the playfield can be used for audience seating); (5) two separated and diversely equipped activity areas — one for early elementary grades, one for later elementary grades; (6) two separate game areas for several kinds of group activities.

These site developments, including the grading, seeding and landscaping, were all in the basic contracts under the direction of the landscape architect, Howard Redfern of Saginaw.

Salina Elementary School does not claim undue attention as a model of economy, even though the total square footage (under the standard A.I.A. formula) of 29,000 was constructed for less than \$12 per square foot. These figures are, in actuality, *below* the regional indexes for the Saginaw area. Furthermore, these cost figures do include some budget items usually omitted from such calculations, such as plant materials for landscaping, fences for the parking lot and the kindergarten play area, a flag pole, and 2400 square feet of paved plaza near the front entrance.

Yet this building is not a model of the usual barren, bleak, "economy-type" school building. Quite the opposite is true. This is evident in some of the basic building features, which include: (1) extensive use of glazed hollow tile; (2) light color range vinyl

floor tile; (3) some 40 lineal feet of high quality chalkboard in each classroom; (4) extensive use of softwood wall panels plus several hundred feet of corkboard; (5) individual room toilets; (6) fluorescent light fixtures; (7) aluminum window sash; (8) 16 or more linear feet of plastic topped, hardwood cabinets for each classroom. Even the intercommunication system to each classroom and to each outside play area is included in the quoted contract cost.

Factors for Economy

Economy also was determined by the following factors: (1) eliminating all exterior face brick in favor of rough-sawed fir lumber and lightweight blocks; (2) reducing the total building cubage by making the classroom ceiling an average height of 8 feet; (3) designing a rather simple heating system with a service core for each cluster of four classrooms, thus eliminating extensive duct work, recirculating lines, and complicated temperature controls; (4) specifying a simple, short metal chimney rather than a large, masonry type.

The established instructional program for the Saginaw public school system dictated, in general, the educational specifications for the basic plan for Salina Elementary School. This educational program provides for a pattern of self-contained classrooms enriched with various resource people, such as specialized music teachers, art teachers, and speech correctionists. Therefore the general classrooms have the usual features of work counters, sinks, fountains and toilet rooms.

In the Salina school the heating system is a new version of the split system. In the usual split system, radiation is installed along the outside walls and ventilation is provided by a duct system with a re-heat coil for each classroom. At Salina, the ventilating unit is installed in the service core of each classroom cluster. Air is run in an underfloor duct to the outside wall where it is blown over the perimeter radiation, heated as required, and introduced into the classroom through a sill grill.

This heating system eliminates the bulk overhead duct work and re-heat coil for each classroom and makes use of perimeter radiation as a re-heat coil. This new version of the split system has installed costs of 25 cents per square foot, which is less than comparable heating and ventilating systems, reported the mechanical and electrical engineer, J. B. Olivieri of Saginaw and Detroit.

The other advantage to this system is that it eliminates the complicated temperature controls. The room temperature is controlled by a thermostat that modulates a hot-water valve.

However, the greater values of the Salina school are to be found in how well the completed building meets the serious questions posed by the planning group of teachers, curriculum supervisors, operating personnel, and architects. In the following pages, attention is focused upon specific details of the building itself to illustrate how well these features serve various educational objectives. These details indicate how, through careful and thoughtful planning, a school can be more functional. (Cont. on p. 84)

SINKS are located in the work counter of each classroom so that the teacher can supervise pupil handwashing. There are no sinks in the toilet rooms, which are located just off the classroom.



For Subtle Supervision

The idea of a "strong hand in a silk glove" is expressed in several of the arrangements to facilitate easy supervision of pupil behavior. For example, the toilet rooms off each classroom have no handwashing sinks. Instead, the sinks are located in the work counter in the classroom, just outside the door to the toilets. Thus it is easy for the teacher to see that each child washes his hands properly. The children discard soiled paper towels through a slot in the front of the sink cabinet; the towels, in turn, fall into a concealed wastebasket.

The general layout of the school and the strategic locations of the glass areas facilitate subtle visual supervision of all corridor areas and all outside play areas. Even the library room is visible from corridor and street sides.

Sometimes pupils are distinctly startled by the less than subtle supervision of the principal. Since she can see from her office most of the street area as well as the large court and baseball area, she can direct pupil behavior several hundred feet from her office via the public address system. Outdoor speakers are located on the far corners of the roof.

The combination of outdoor covered corridors, outside exits from each classroom, and play areas that are visible from and adjacent to the classroom gives the teacher an easy command of her group during outdoor activity periods. The several segregated and differently equipped play areas reduce conflicts between different age and interest groups.

(Text Continued on Page 86)



COATROOM provides a pleasant, home atmosphere. Entered from the outdoors, this vestibule serves two adjoining classrooms. Upper slotted wood shelves hold books, and lower slotted benches provide a comfortable place to sit while putting on boots or other paraphernalia.



REFERENCE LIBRARY augments the individual classroom library arrangements. The library also is used for special educational work, small committee meetings, and student study groups.



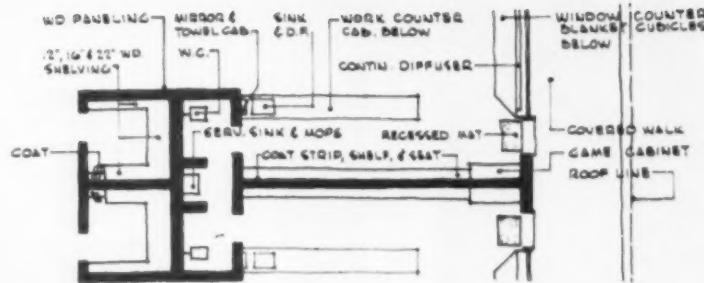
OPEN LOBBY naturally and pleasantly welcomes visitors. The inner secretarial office can be closed off by sliding glass panels, shown at left in front of the typist. The waiting room appropriately borrows its general size, scale, wall finishes, and furniture from a modern home living room, rather than a business office.



VERSATILITY and flexibility are the bywords in this third grade classroom. This whole concept is augmented by soft tones of the textured acoustical ceiling and laminated wood beams. The pine paneling is utilized for displays of teaching aids. Full utilization of the 1000 square feet of floor space, complete with library area and work counter, is achieved.



PLAN of kindergarten service core, with its many "little" facilities for a better school, is shown at right. Driving rain is kept away from classroom doors by 8 foot roof overhangs. Weather stripping and a low step-down to the outside walk reduce the problems of water seepage and mud. Ground planting was arranged so that grass grows up to the hard surfaced walks.



MAILBOXES (upper photo) for teachers are located in the main corridor. There is no crowded pupil traffic here because pupils enter their classrooms directly from the outside.

BOILER ROOM (lower photo) has main air intake hidden behind a yellow, folded, metal plate, shown at left of flag pole. Stacks for the main boiler and the incinerator are of modernistic metal extending less than 25 feet from the ground level.

For Teacher Efficiency

When a teacher drives to the Salina School, he enters a paved parking lot with space reserved for his car. A covered walk leads directly to his classroom. With his individual key he can enter and leave his own classroom to suit his own schedule. Since each room has its own controls for heat, light and water, and also toilet facilities, teachers frequently work early and late.

Each teacher's work is facilitated by a large, double pedestal desk and by convenient file cabinets. These teacher work stations are supplemented by 300 square foot supply storage rooms in each classroom. Each of these classroom supply areas is large enough to provide the convenience and operating economy of a semester's quantity of teaching materials.

The shelves were thoughtfully sized to include some that are large enough to hold 24 by 36 inch paper. Other shelves are spacious enough to furnish "dead storage" for an accumulation of seasonal and special project materials.

Additional conveniences for the teacher's work are furnished in a centrally located workroom equipped with curriculum materials, duplicating equipment, and audio-visual facilities. Locating the teachers' mailboxes in the open corridor eliminates the usually vexing traffic jam in the office. The teachers lounge is adjacent to the kitchen area for the convenience of those teachers who prefer to prepare their lunch in the building.



CURTAIN CALL! The play's the thing to this imaginative group of kindergartners. Low ceiling and the special overhead lighting at one end of the kindergarten room help to set the stage. Tackboard on the back wall is handy for holding up the "scenery."

For Simplified Maintenance and Operation

There are little "accidents" almost every day that kindergartners make on the floor. And for these vexing situations that take custodial time, the architect provided a handy service sink between the kindergartens. This same thoughtful concern for easing daily housekeeping work resulted also in recessed floor mats and mud scrapers by every outside door.

Besides these little built-in features to simplify and reduce the daily costs of maintenance and operation, a number of larger features, incorporated into the basic structure and design of this building, eventually will result in substantial savings. For example, like all school buildings, Salina contains several hundred lineal feet of pipe. Eventually, there could be costly leaks and breaks and stuck valves. But in this building more than 97 per cent of all the piping is immediately accessible for repair because it is covered only by movable cabinetwork and plywood panels.

Although some \$25,000 was "saved" in the original cost of the building by not using exterior brick, a question arose as to the extra long-term cost of maintaining the exposed lightweight exterior blocks. To solve this problem, roof extensions of about 8 feet were constructed over most of the exterior walls. These extensions not only reduce the ravages of weather on the exterior walls, but also serve as covers for the exterior corridors and play areas. At the same time, these overhangs improve the natural classroom lighting scheme.

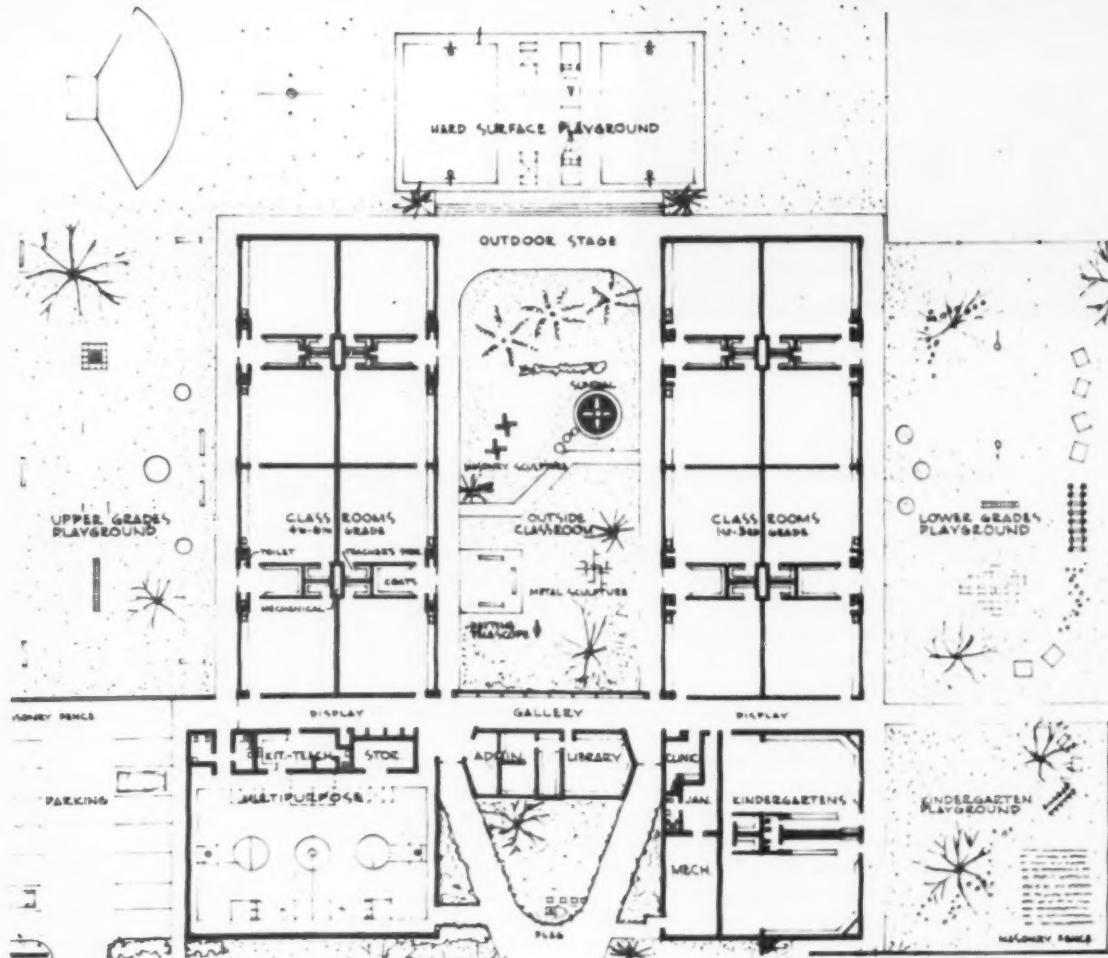
Certainly the question of exterior corridors merits the serious debates it has received within the Michigan climate. It is not proposed to debate here all of the issues involved in this entire matter. The question of *interior versus exterior* corridors was debated fully by the many people involved in planning the school.

Saginaw has several school buildings, all with regular interior corridors. However, the designing of exterior corridors in this project did save gross total floor space and did reduce the total original cost. More important at this point is the fact that it is much easier, faster and cheaper to perform, to an acceptable standard, the daily housekeeping tasks of cleaning several hundred feet of *exterior* corridor than it is to clean the same area of *interior* corridor.

Also, isn't there a possible positive connection between the fact that during several unscheduled visits the building was observed to be unusually clean, neat and orderly, and the fact that in this building a little extra money was invested to provide the custodians with a well lighted, glazed tiled office and shower room?

In the opinion of Supt. C. C. Coulter, "the Salina School is unique and functional. The principal and teachers appear to like it very much."

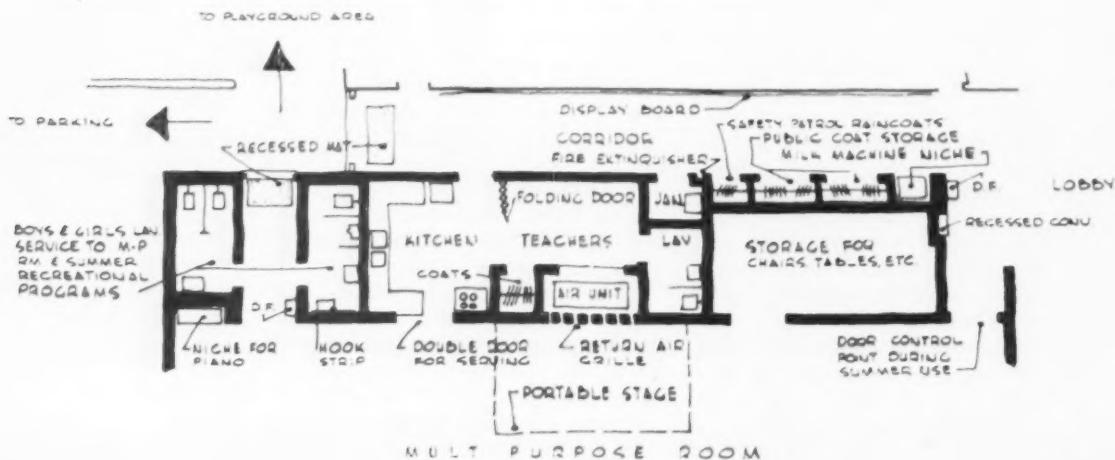
Other details that facilitate the operation and maintenance of this building are recorded in the accompanying illustrations. Indeed, it is the little things that make a better elementary school! *(Cont. on Next Page)*

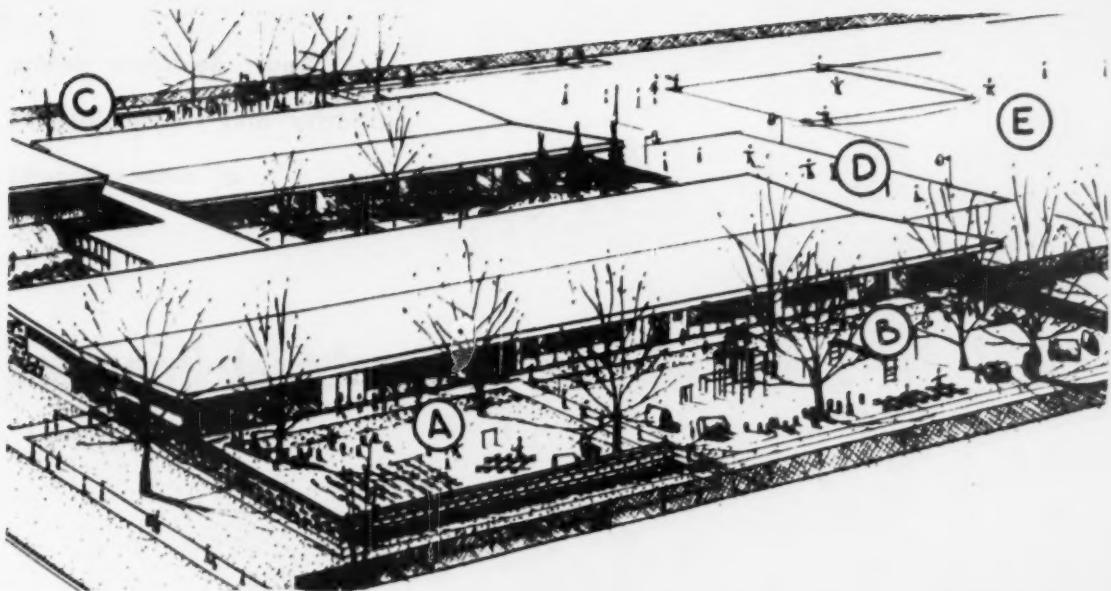


PLAN (above) shows the total five-acre area of Salina School with a square footage of 29,000. The building, which has 12 classrooms and two kindergartens, was constructed for less than \$12 per square foot. . . .

ENLARGEMENT of the service facilities for the multi-purpose room is shown below. The problem of where

to put things is solved here. There is a place for the patrol boys' raincoats and a place for the parents' coats and hats when the latter attend P.T.A. meetings. Toilet rooms, kitchen and exits are arranged so that the entire building will not have to be opened when community recreation groups use the school in the academic year and in the summer.





CLOSE, functional relationships between the indoor classrooms and the outdoor areas are a major advantage to this kind of site development. The labeled areas on the perspective (above) and the following equipment list reveal the depth and variety of activities available to pupils who attend Salina School. The five playgrounds are equipped as follows: (A) **Kindergarten** — rest area, chinning bars, balance beams, walk-in tile, garden, sand pit; (B) **Grades 1 Through 3** — rest area, chinning bars, horizontal ladder, climbing structure, backboard, walk-in tile, balance beams, marble rings; (C) **Grades 4 Through 6** — horizontal ladder, climbing structure, marble rings, chinning bars; (D) **Hard Top Area for All Grades** — cross court basketball, volleyball courts with removable posts, shuffleboard, several 24 foot circles, hopscotch squares; (E) **Game Fields** — for lower grades: softball diamond, marble areas, high jump pit, broad jump pit and take-off boards, tether ball; for upper grades: two softball diamonds, soccer field, marble rings, high jump pit, broad jump pit and take-off board, tether ball.

DISPLAY AREA in corridor is a continual art exhibit. Accent lighting (upper photo) dramatizes the pupils' artwork displayed on tackboard. Wood valance on which spotlights are mounted contains main heating lines. The plastic covered shelves (lower photo) are for art objects. Plywood box at the top of the windows covers one of the main pipes and conduit runs. Intermittent panels of colored glass add beauty to the corridor displays.

All photographs, including the three natural color transparencies on the cover, are by **Richard Atamian**, master photographer, Bradford-LaRiviere, Inc., Saginaw, Mich.



**Court decisions define
authority and responsibilities
of school boards**

Legal Principles

LITTLE has appeared in print regarding the law as it pertains to school officials and the architect. Yet this mutual relationship is a subject of prime importance.

This series of four articles will present litigations involving school boards and their architects and will isolate legal principles set down by the higher courts. Reference will be made, too, to cases involving other types of corporate bodies, as well as individuals, where these are applicable to school situations.

This report will deal only with those legal principles that have been recognized by at least some of our courts. Because courts differ, not only in different jurisdictions, but at different times in the same jurisdiction, the principles mentioned here should not be interpreted as representing the law in any particular state. At best they are guides that might well be used in avoiding legal difficulty. When trouble arises or, rather, when it seems possible that trouble may arise, there is no substitute for the services of a qualified attorney.

Defining an Architect. The courts have, on occasion, defined the term "architect." For the purpose of this study the following two legal assumptions are made: (1) An architect is a professional man engaged in rendering services of a technical and personal nature; (2) by virtue of holding a license, an architect is presumed

to possess the skill and ability required of one in his profession.

This first installment of a four-part report reviews the legal considerations involved when a school system employs an architect.

Authority of Board To Employ. Where there is a statute authorizing public bodies such as school boards to employ architects, it is, of course, decisive of the matter. In the absence of such a statute the courts are agreed that such bodies have the implied authority to contract for architectural services.¹

In commenting on this a New Jersey court said:

"It would seem . . . that the board of education had implied power to incur reasonable expenses for obtaining such

¹Wyckoff *v.* Force, 214 P. 489, 61 Cal. App. 246 (1923); Spalding County *v.* W. Chamberlin & Co., 61 S.E. 533 Ga. (1908); William S. Drummer, Inc. *v.* City of Cambridge, 184 N.E. 458, 282 Mass. 170 (1933); Fiske *v.* School District of the City of Lincoln, 80 N.W. 265, 59 Neb. 51 (1899) affirming 78 N.W. 392, 58 Neb. 163 (1899); Hankin *v.* Board of Education of Hamilton Township, 135A, (2d) 329, 47 N.J.S. 70 (1957); Sleight *v.* Board of Education of City of Paterson, 170 A. 598, 112 N.J.L. 422 (1934); People *ex rel.* Kiehn *v.* Board of Education of City of Utica, 190 N.Y. 798, 198 App. Div. 476 (1921); Kistner *v.* Pomeroy, 258 P. 619, 84 Cal. App. 550 (1927); Barringer *v.* Guilford School Township, 194 N.E. 651, 100 Ind. App. 445 (1935); Weathers *v.* Layton and Forsyth, 230 P. 750, 104 Okla. 14 (1924); Lairg *v.* School District No. 10 of Jackson County, 224 P. (2d) 923 Ore. (1950); Kline *v.* School District of Longswamp, 35 Berks Co. 181, 35 Mun. 17 Pa. (1945); Board of Trustees *v.* Jacob, 170 S.W. 795 Tex. (1914); Harlingen Independent School District *v.* Page, 48 S.W. (2d) 983 Tex. (1952); Pehrson *v.* School District 77 P. (2d) 1022, 194 Wash. 334 (1958).

Govern Employment of Architects

expert information as might be necessary to furnish a basis for an accurate estimate of the cost of the proposed school building and that this justified the engagement by the board of education of an architect, and that upon the performance of his services the architect can maintain an action on the *quantum meruit* [not on the contract] to recover reasonable compensation therefor.²

Delegation of Board's Authority To Employ. While a board of education, like any other public body, has the authority to employ an architect, it should be noted that this authority is one that the public corporation itself must exercise. It may not delegate this authority to a committee of its members, to an officer or officers, or to an administrative official.³ This general rule grows out of a principle of law that holds that a public corporation may not delegate to another the discretionary authority vested in it.

²Slight *v.* Board of Education of City of Paterson, 170 A. 598, 112 N.J.L. 422 (1934).

³Dierks Special School District *v.* Van Dyke, 237 S.W. 428, 152 Ark. 27 (1922); Johnson-Olmstead Realty Co. *v.* City and County of Denver, 1 P. (2d) 928 Colo. (1931); Gaddis *v.* Barton School Township of Gibson County, 164 N.E. 499 Ind. (1929); Driscoll *v.* Independent School District of Council Bluffs, 16 N.W. 291, 61 Iowa 426 (1885); Jameison *v.* City of Paducah, 241 S.W. 327, 195 Ky. 71 (1922); Horgan and Slattery *v.* City of New York, 100 N.Y.S. 68, 114 App. Div. 555 (1906); Tonini *v.* School District No. 17 of Seminole County, 8 P. (2d) 67 Okla. (1932); Pehrson *v.* School District No. 334, 77 P. (2d) 1022, 194 Wash. 334 (1938).

⁴Jameison *v.* City of Paducah, 241 S.W. 327, 195 Ky. 71 (1922).

A Kentucky court, in speaking of a municipal corporation, has stated this rule as follows: "A city council, board of commissioners, or fiscal court cannot delegate to another, not even its individual members, the performance of official duties involving the exercise of discretion, and if it attempts so to do the action and contract of the agent or committee is not binding on the official body."⁴ This rule is as applicable to a board of education as it is to a city council.

Competitive Bidding Statutes Not Applicable. Most states have statutes that require public corporations such as school districts to resort to competitive bidding as the basis for letting contracts in excess of certain minimum amounts. Such statutes, so it is generally held, are not applicable to contracts of employment with professional personnel such as architects.⁵ The courts reason that because such contracts are for professional

and personal services, it is not the intent of the legislature to require bidding. A decision of a California court illustrates this line of reasoning:

"The contention here made [that the board was without authority to employ an architect without competitive bidding] has long since been denied judicially and legislatively. It has been held that because an architect is an artist, that his work requires taste, skill and technical learning and ability of a rare kind, it would be bad judgment to advertise and get many bids when the lowest bidder might be also the least capable and most inexperienced and his bid absolutely unacceptable and therefor the employment of a person who is highly and technically skilled in his science or profession is one which may properly be made without competitive bidding. . . . Where competitive proposals do not produce an advantage, a statute requiring competitive bidding does not apply."⁶

Contracts of Employment. Much litigation has centered on contracts between school boards and architects. From these cases certain general principles of law emerge. One of these — and a fundamental one — is that such a contract, to be legal, must, like any other contract, be made in conformance with the statutes.⁷

(Continued on Page 114)

⁵Cobb *v.* Pasadena City Board of Education, 285 P. (2d) 41 Cal. (1955); Johnson-Olmstead Realty Co. *v.* City and County of Denver, 1 P. (2d) 928 Colo. (1931); Krohnberg *v.* Pass, 244 N.W. 329 Minn. (1932); Horgan and Slattery *v.* City of New York, 100 N.Y.S. 68, 114 App. Div. 555 (1906); People ex rel. Kiehm *v.* Board of Education of City of Utica, 199 N.Y.S. 798, 198 App. Div. 476 (1921); Rosatti *v.* Common School District No. 96, 204 N.W. 833, 52 N.D. 931 (1925); State *v.* Brown, 21 S.W. (2d) 721 Tenn. (1929); Stephens County *v.* J. N. McCammon, Inc., 40 S.W. (2d) 67 Tex. (1931); N.Y.C.R.R. Co. *v.* County of Westchester, 159 N.Y.S. 560 (1916) (affirmed 121 N.E. 880, 224 N.Y. 646 (1918); Weather *v.* Layton and Forsyth, 230 P. 750, 104 Okla. 14 (1924); Hibbs *v.* Arensberg, 119 A. 727, 276 Pa. 24 (1923).

Educators Join Forces in Sketching Image of Successful School Business Administrator

SCHOOL business administration has arrived as a potent and positive force in American education. . . . The school business administrator is a powerful force supporting the improvement of educational opportunity rather than serving chiefly as a watchdog of the treasury, which too often was considered his chief role decades ago."

This dual thesis provides the backdrop for "The School Business Administrator," most recent publication of the Association of School Business Officials of the United States and Canada published cooperatively with the American Association of School Administrators. The book constitutes the report of a special A.S.B.O. committee. G. Alvin Wilson, A.S.B.O. president, states that the bulletin "represents a forward step by our profession to define its work, set the qualifications and responsibilities, and restate its code of ethics."

One question that needed to be answered immediately was: Who is the school business administrator? The committee decided that "within the context of this publication, persons dealing with specific phases of school business administration will be referred to as school business *officials*. Persons dealing with the total area of school business, and with subordinate school business officials, will be designated as school business *administrators*."

Family Blessings. If parental consent is significant to the launching of a publishing venture of this type, then "The School Business Administrator" should meet with wide school family acceptance. On the special committee headed by Frederick W. Hill, assistant superintendent, business affairs, Minneapolis public schools, were:

three superintendents, an assistant superintendent, two professors of education, and a director of a state education department division of school business management, in addition to six school business officers.¹

Dr. Hill states that committee members "were able to get a large area of agreement on the issues of (1) dual versus unit control, (2) educational preparation *versus* business preparation, and (3) certification *versus* noncertification."

In the foreword, Finis E. Engleman, executive secretary of the American Association of School Administrators, states that the executive committee of the A.A.S.A. "forthrightly approves publication of this volume." The superintendents' organization, through a special com-

¹Henry F. Daum, Abington, Pa.; Donald F. Hassard, Fort William, Ont., Canada; Andrew C. Hatson Jr., Knoxville, Tenn.; Henry H. Linn, New York City; Nelson D. Lloyd, Los Angeles; Rufus A. Putnam, Minneapolis; Jack Elzay, Ann Arbor, Mich.; J. Harold Husband, Grosse Pointe, Mich.; Schuyler C. Joyner, Los Angeles; Timothy M. Maloney, Irvington, N.J.; Maurice G. Osborne, Albany, N.Y.; Malcolm H. Reed, Auburn, N.Y.; E. E. Watson, University City, Mo.

THE SCHOOL BUSINESS ADMINISTRATOR. A special committee report sponsored by the Association of School Business Officials of the United States and Canada. Frederick W. Hill, chairman. Bulletin No. 21, A.S.B.O., in cooperation with the American Association of School Administrators, 1960. Pp. 80. \$1.



Frederick W. Hill

mittee of its members, "was actively involved in reviewing, editing and revising the original document prepared by A.S.B.O. members." Executive representatives of the National Conference of Professors of Educational Administration and of the National School Boards Association also contributed their thinking.

Responsibilities and Functions. Chapter 1 incorporates a brief review of the origin of school business management, beginning with the appointment of an "acting manager of schools" in Cleveland, in 1841. A superintendent of schools was not appointed until 12 years later.

Chapter 2 has this to say regarding the responsibilities of the school business administrator: "The effective business administrator will seek to insure that every activity of his staff will have vital meaning in such areas as: improving educational opportunity; providing and maintaining funds, facilities and services; attaining and developing noninstructional personnel, and maintaining effective interrelationships with the community."

The same chapter states that in large school districts, under the unit control plan, the school business administrator would be one of a number of assistant superintendents making up the superintendent's cabinet — one member of the team that helps determine school district policies. To develop this situation, he must be given the authority to act; he must not be inhibited in the carrying out of his responsibilities within the overall policy of the district. This is the kind of environment that provides the type of relief for the educational administrator that will make the latter more effective before the public.

(Continued on Page 96)



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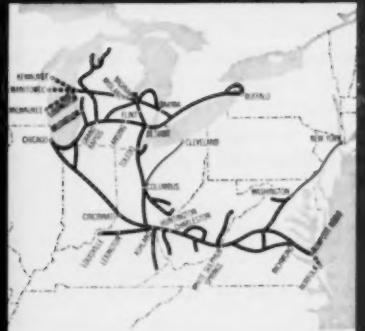
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'The School Business Administrator'

(Continued From Page 92)

Eleven major areas of responsibility are cataloged.² The seven basic functions of management — planning, organizing, controlling, coordinating, directing, staffing and evaluating — are identified. Next, the most commonly recognized functions of the school business administrator are tabulated under 19 headings.³ Most of these, in turn, are broken down into subfunctions.

Business Assistants. The school business administrator usually is in charge of all personnel not required to have educational credentials. Perhaps the first subdivision in the business office is the employing of a supervisor of buildings and grounds and the second is the hiring of a bookkeeper or accountant.

As to the relation of the business office to the remainder of the school system, the volume states: "The business official must always remember that schools are established to teach children, and that those who are charged with the responsibility for this teaching are the ones who require and will appreciate prompt and efficient service by the business department. . . . In the interest of school family harmony, sound policies and procedures should be reduced to written form."

Preparation and Experience. "As the demand for better education increases, so the professional standards of the school business administrator must be raised," G. Alvin Wilson, A.S.B.O. president, writes in his "appreciation" of the volume. In keeping with this thought, the booklet makes this prediction:

"In the preparation of future business administrators, having chief re-

²Budgeting and financial planning, purchasing and supply management, plant planning and construction, school community relations, personnel management, inservice training, operation and maintenance of plant, transportation, food services, accounting and reporting, and office management.

³Financial planning, accounting, debt service and capital fund management, auditing, purchasing and supply management, school plant planning and construction, operation of plant (custodial, gardening, engineering services), maintenance of plant, real estate management, personnel management, permanent property records and custody of legal papers, transportation of pupils, food service operations, and insurance. Other functions listed are: cost analysis; reporting; board policies and administrative procedures as related to fiscal and noninstructional matters; responsibilities for elections and bond referenda; school assessment, levy and tax collection procedures.

sponsibility for all school business functions, it is probable that a minimum of a B.S. or B.A. degree will be required, together with appropriate systematic study in school business administration, general administration, school law, finance and accounting; school plant operation, planning and construction, and school curriculum, and management technics, personnel work, and a broad general education. . . . Preference will probably be given to those whose training and experience include some aspects of education or teaching . . . generally a minimum of at least four years of experience."

Personal Characteristics. On this subject the book prescribes in this fashion:

Because management involves getting things done through the efforts of others, a successful school business administrator must be one who has plenty of directed drive, likes people and shows it, gets along well with others, has integrity, and is fair in his dealings with all.

Other desirable personal characteristics are: be a good listener, be able to establish a good work climate, be a self-starter, possess a high threshold of annoiance, a sense of values, be able to develop high articulation and writing skills, and to use language that will avoid needless offense to anyone. In addition, the business administrator should have the ability to make problems of others his own, be able to accept criticism without becoming a "yes" man, be able to make decisions, and be willing to bask in reflected glory. He must have better than average intellect since a system can be no better than the level of thinking of its administrators. Certainly, he must be approachable.

The emphasis here is upon the thinking or intellectual processes as opposed to the "doing" procedures, which those of lesser rank and perhaps more specialized training can perform more effectively.

When To Employ a Business Administrator. Primarily, the number and nature of tasks to be performed, coupled with the personnel and equipment resources available, will have a direct bearing on the advisability of creating the position of school business administrator. To help

school systems arrive at a decision, the text sets up a series of 14 check questions.

It also indicates that experience in many districts suggests the following formula: When average daily attendance of 1000 is reached, it might be profitable to employ a business assistant or administrative assistant in charge of business affairs; when the district reaches 1500 to 2000 pupils, it appears desirable that the position should be that of school business administrator.

Further formula figures: Experience has shown that any elementary district with 1500 pupils, or any consolidated district maintaining grades 1 through 12 with as many as 1200 pupils, finds it advantageous to employ a professionally trained person in school business administration. The figure represents typical situations, and stipulated figures depend on local conditions and problems.

Current Status of Certification. A survey of certification policies authorized by A.S.B.O. indicates the following: Slightly fewer than half the states require certification for the school business official. In the majority of those states where certification is required, the school business official utilizes the same certification standards required of the general superintendent and, in most cases, actually is issued a superintendent's certificate. Among those states where the school business official does not have the title of assistant superintendent or administrative assistant, very few have certification requirements.

After reproducing in detail two suggested plans for certifying school business officials — developed in New Jersey and New York State — this chapter concludes: "Until more adequate training opportunities for the preparation of school business administrators are provided by more colleges and universities, it seems unlikely that rigid certification requirements can be or should be adopted. This training may ultimately be provided either as part of the requirements for an administrative credential or as a complete special course of study and academic degree not yet provided by many institutions of higher learning."

Creating the Position. Once a school system has determined that a (Continued on Page 122)

EMPLOYMENT application forms that administrators use to evaluate prospective teachers invariably contain a section for listing past or present out-of-school activities and interests. The attention given to such activities is due, in part, to the heightened emphasis on utilizing leisure time, which has been promoted by technological and industrial advances in recent years.¹

An administrator who uses a teacher's out-of-school activity record as a criterion, even though a minor one, of teaching competency, is basing his judgment on an *untested assumption*. Although many administrators use a prospective teacher's activity record, and perhaps wisely so, as an index of social acceptability or potential community influence, others have assumed that some sort of positive relationship exists between teachers' participation in out-of-school activities and teaching ability. That this notion is common is evident in the numerous teacher-education textbooks that urge teachers to participate in a wide range of out-of-school activities as an aid to their *teaching effectiveness*.²

To test the validity of this assumption, we conducted a research study that would test the relationships between several measures of teachers' out-of-school activities and two measures of teaching effectiveness.³

Our subjects were 880 public school teachers. This sample represents an entire year's (1954) teacher-education graduates of all Indiana institutions of higher learning with standard accreditation for teacher education. These 24 institutions represent all types of colleges and universities, *i.e.* large, small, public, sectarian, nonsectarian and so forth. In order to deal only with practicing teachers and not with teacher-education graduates who either did not enter or did not remain in the teaching

profession, only graduates who were teaching in Indiana public schools during the 1956-57 academic year were selected as subjects.

The two indexes of teaching effectiveness used in the study were: (1) administrators' ratings of the subjects' over-all teaching effectiveness, and

Out-of-School Activities

May Not Measure

Teacher Competence

(2) subjects' scores on the Minnesota Teacher Attitude Inventory (M.T.A.I.). The first measure is based upon an administrator's perception of a teacher's effectiveness; the second measure is based upon an aspect of the teacher's personality revealed through a self-report inventory.

The rating form on which participating teachers were evaluated by their principals or superintendents was specially constructed for the study. To reduce the usual clustering of ratings at the high end of a rating scale, the device was titled "Teacher Ranking Form." The administrator was instructed to compare the teacher (to be rated) to all other teachers with whom he had worked and to place that teacher in the appropriate decile rank in terms of general effectiveness.

The M.T.A.I. is an instrument empirically designed and validated to assess teachers' attitudes toward teacher-pupil relations.⁴ Educators generally concede that a classroom learning atmosphere is dependent upon the quality of pupil-teacher rapport. Since this rapport is highly dependent upon the teacher's attitude toward pupil-teacher relations, the

¹The research reported herein was performed pursuant to a contract with the U. S. Office of Education, Department of Health, Education and Welfare.

²For example, see: Wiles, Kimball: *Supervision for Better Schools*, Prentice-Hall, Inc., New York, 1955, p. 117; Alcorn, Marvin D.; Houseman, Richard A.; Shunert, Jim R.: *Better Teaching in Secondary Schools*, Henry Holt and Co., New York, 1954, p. 474; Lee, Gordon C.: *An Introduction to Education in Modern America*, Henry Holt and Co., New York, 1953, p. 297.

³Popham, W. James, and Standee, Lloyd S.: *Out-of-School Activities and Professional Performance of Teachers*, *Bulletin of the School of Education* 34:4 (July) 1958.

JAMES W. POPHAM

LLOYD SCOTT STANDLEE

⁴Cook, Walter W.; Leeds, Carroll H.; Callis, Robert: *Minnesota Teacher Attitude Inventory Manual*, Psychological Corporation, New York, 1951.

Table 1 — Relationships Between Teachers' Out-of-School Activities and Two Criteria of Teaching Effectiveness

OUT-OF-SCHOOL ACTIVITIES ¹	TEACHING EFFECTIVENESS	
	M.T.A.I. Score	Administrators' Rating
Taking college courses for credit	N.R. ²	0.10 ³
Attending state, regional, national meetings	0.05	N.R.
Attending local educational meetings	0.01	N.R.
Reading professional periodicals	0.01	N.R.
Reading professional books	0.05	0.05
Engaging in other employment	N.R.	N.R.
Preparing teaching assignments	N.R.	N.R.
Serving on educational committees	0.05	N.R.
Attending P.T.A. meetings	0.01	0.10
Conferring with parents	0.01	N.R.
Attending school events (as a spectator)	0.05	N.R.
Doing housework	0.01	0.05
Sleeping (nightly)	N.R.	N.R.
Viewing television	0.01	N.R.
Listening to the radio	N.R.	N.R.
Reading nonprofessional literature	N.R.	N.R.
Participating in religious organizations	0.10	0.10
Participating in service organizations	0.10	0.01
Participating in professional organizations	0.01	N.R.
Participating in military-patriotic organizations	N.R.	N.R.
Participating in youth groups	N.R.	N.R.
Participating in fraternal orders	N.R.	0.05
Participating in relief-welfare organizations	N.R.	0.05
Participating in leisure organizations	N.R.	0.05
Participating in individual sports	N.R.	0.05
Participating in team sports	N.R.	N.R.
Attending spectator sports	N.R.	N.R.
Attending commercial entertainment	N.R.	N.R.
Participating in noncommercial entertainment	0.05	N.R.
Engaging in hobbies	N.R.	N.R.

¹Based upon categorization of teachers' responses to a check list of 124 activities.

²N.R. = No relation.

³Relationships significant at the 1 per cent level of confidence are indicated by 0.01, at the 5 per cent level by 0.05, and at the 10 per cent level by 0.10. Thus a relationship significant at the 0.01 level of confidence could happen because of chance less than one time out of a hundred, at the .05 level less than five times out of a hundred, at the 0.10 level less than 10 times out of a hundred.

M.T.A.I. was considered to assess an indirect but important aspect of teacher effectiveness. Several recent research investigations tend to support this contention.

Data regarding subjects' out-of-school activities were obtained through a questionnaire constructed for the study. The questionnaire was primarily of the check list type, *i.e.* teachers were asked to check the frequency of their participation in 124 listed activities. The teachers also were asked to indicate any additional activities they considered important. (Such additional activities, however, were few in number.)

Copies of the M.T.A.I. and out-of-school activities questionnaire were mailed to the 880 teachers in the sample. Copies of the specially designed rating scale were mailed to principals or superintendents. After two follow-up mailings, completed research materials were supplied by 83.9 per cent of the subjects and by 95.1 per cent of the administrators.

Relationships between teachers' out-of-school activities and their teaching effectiveness, as measured by M.T.A.I. scores and administrators' ratings, were tested for significance by means of the chi square statistical technic.⁵

Results of the study indicate that the question of whether there is a relationship⁶ between out-of-school activities of teachers and their teaching

⁵Chi square is an important member of the family of nonparametric (distribution-free) statistics which may be used to test hypotheses of differences between expected frequencies (based on mathematical probability expectations) and observed frequencies (the actual frequencies obtained in the research data). If the difference between expected and observed frequencies is sufficiently great, the statistical test establishes a relationship that is statistically significant, *i.e.* something other than a mere chance relationship. For a more detailed explanation, see: Edwards, Allen L.: *Statistical Methods for the Behavioral Sciences*, Rinehart and Company, Inc., New York, 1954.

⁶Caution should be exercised in interpreting the relationships established by this research. The design of the study does not permit the determination of causality. One may not assert, then, that teachers become more effective because they participate in certain activities. Though this may be true, it is quite possible that teachers participate in certain activities because they are effective teachers, or that teachers are effective and participate in activities because of a third factor, for example, motivation. The purpose of the present investigation was simply to determine if there are relationships of any kind between teachers' effectiveness and their participation in out-of-school activities.

effectiveness must have a qualified answer. Whether the answer is Yes, or No, depends upon two factors: (1) the particular out-of-school activity involved, and (2) the criterion of teaching effectiveness employed. This is readily apparent from an inspection of Table 1, where it is seen that some out-of-school activities were related to both criteria of teacher effectiveness; some were related to only one criterion, and some were related to neither criterion (N.R.).

Activities Related to Criteria

Only five of the 30 out-of-school activities were related to both criteria of teaching effectiveness. These were: number of professional books read, attendance at P.T.A. meetings, time spent doing housework, participation in religious organizations, and participation in service organizations.

All of these relationships were positive in nature. Teachers who participated to a greater extent in these activities tended to receive higher administrators' ratings and to obtain higher M.T.A.I. scores. In terms of these two criteria, the superior teacher evidenced greater participation in the foregoing activities than did the inferior teacher.

Five categories of out-of-school activities were related to administrators' ratings of teaching effectiveness, but not to M.T.A.I. scores. These were: current enrollment in college courses for credit, and participation in relief-welfare organizations, leisure organizations, individual sports, and team sports.

These relationships also were positive in nature, the better rated teachers participating to a greater extent in the activities than those teachers

who received lower administrative ratings.

Nine categories of out-of-school activities were related to M.T.A.I. scores, but not to administrators' ratings of teaching effectiveness. These were: attending state, regional and national professional meetings; attending local educational organization meetings; reading professional periodicals; serving on educational committees; conferring with parents; attending school events; watching television; participating in professional organizations, and engaging in hobbies.

These relationships also were generally positive in nature, i.e. teachers who participated to a greater extent in the activities tended to obtain higher M.T.A.I. scores than did those teachers who participated less.

No Relation to Criteria

Eleven categories of out-of-school activities were related to neither criterion of teaching effectiveness. These were: engaging in other employment; preparing teaching assignments; sleeping nightly; listening to the radio; reading nonprofessional literature; participating in military-patriotic organizations; participating in youth groups; participating in fraternal orders; participating in noncommercial entertainment; attending spectator sports, and attending commercial entertainment.

Many out-of-school activities, then, were not indicative of superior or inferior teaching by either criterion of teaching performance.

From this analysis it is seen that

more out-of-school activities of teachers were significantly related to M.T.A.I. scores than to administrators' ratings of teaching effectiveness. There also seemed to be a qualitative difference.

The out-of-school activities most consistently related to M.T.A.I. scores were of a professional nature, e.g. attending professional meetings, engaging in educational committees, and conferring with parents. Of 14 activities significantly related to M.T.A.I. scores, nine were of a professional nature.

Nonprofessional Interests

The out-of-school activities most consistently related to administrators' ratings were nonprofessional organizations and sports activities, e.g. participation in relief-welfare organizations, leisure organizations, individual sports, and team sports. Of 10 activities significantly related to administrators' ratings, six represented participation in nonprofessional organizations and sports activities, and only three represented participation in professional activities.

Obviously, then, the two criteria of teaching effectiveness employed in this study were essentially different in nature. The M.T.A.I. scores seem to be based upon the professional aspects of teachers' out-of-school activities; whereas, administrators' ratings show little relationship to professional education activities, as defined herein, but do show considerable relationship to areas of teachers' activities associated with community life.

This suggests that administrators' ratings of teaching effectiveness may be based in large measure on so-called "human values" rather than on teaching competence *per se*.

Does all this mean that administrators should discontinue asking prospective teachers about their out-of-school activities? Of course not. Such a conclusion would be too ambitious for one research study, which certainly was not exhaustive of the criteria of teacher effectiveness or the measures of out-of-school activities. The study does, however, indicate three limitations that administrators should take into consideration:

1. Many out-of-school activities of teachers are not related to either of two criteria of teaching effectiveness: attitude toward pupil-teacher relationships as indicated by M.T.A.I. scores, and over-all teaching effectiveness as indicated by administrators' ratings.

2. The particular criterion of teaching effectiveness employed will influence the pattern of relationships between teaching effectiveness and out-of-school activities. The professional out-of-school activities of teachers, for example, are indicative of their attitude toward pupil-teacher relations, but not of administrators' ratings of over-all teaching effectiveness.

3. Administrators tend to let the community adjustment of teachers influence their ratings of teaching effectiveness. This does not mean that administrators should rate teachers *only* on behavior in the classroom; they should, however, be aware of what is included in their rating. ■

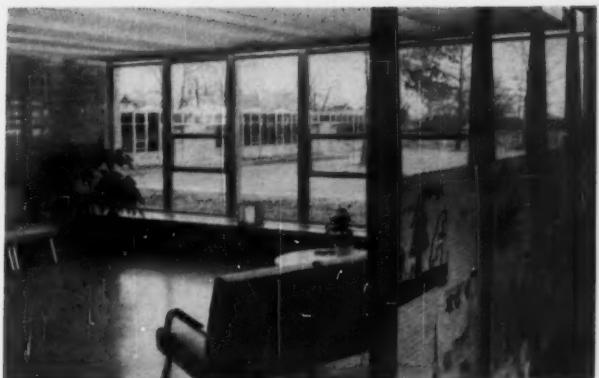
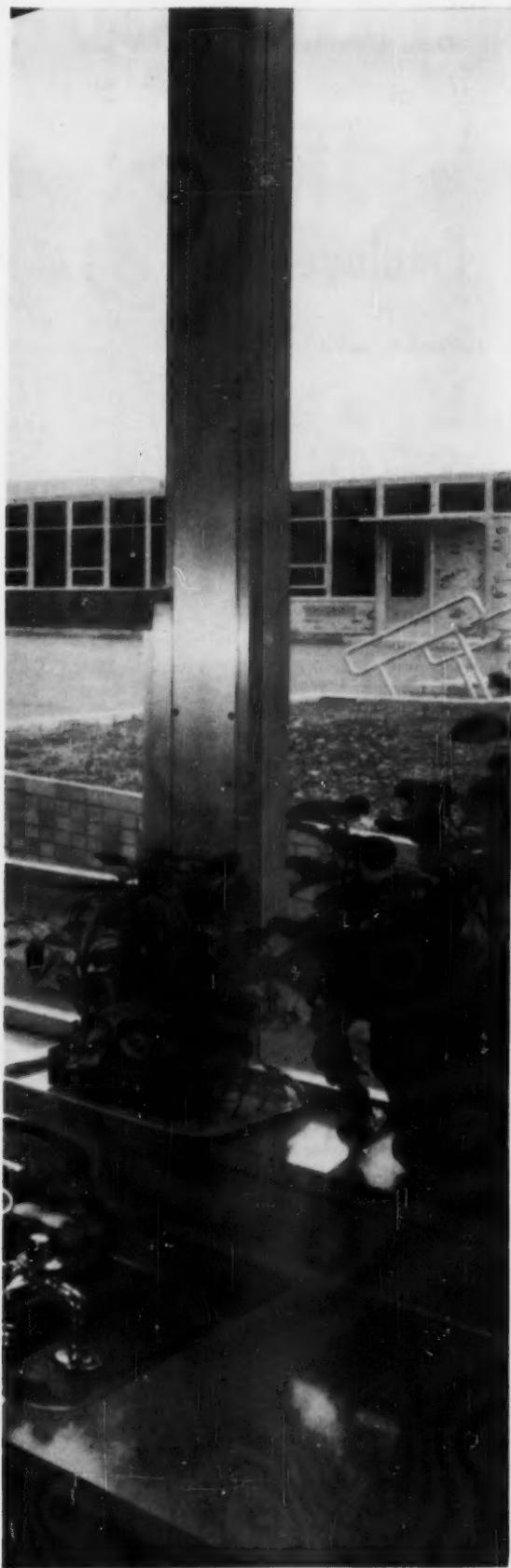


W. JAMES POPHAM (left) . . . assistant professor, department of education and psychology, Kansas State College, Pittsburg, since 1958 . . . research assistant, Indiana University, 1956-58 . . . secondary teacher, Heppner, Ore., 1954-56; LLOYD SCOTT STANDLEE . . . associate professor, University of Florida, since 1958 . . . at Indiana University, 1952-58 . . . with New York City Board of Higher Education, 1951-52 . . . with New York Law School, 1950-52.





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**The average school lunch employee is
a woman past 50, short and heavy. Here is how to**

Plan Kitchen Facilities To 'Fit' Employe

MARY deGARMO BRYAN

THE school lunch program is a "billion dollar business." About 25 per cent of the money is paid in salaries and wages to an estimated 200,000 full-time and part-time employees in thousands of school food service programs. Except for a small number of men employed in a few large city school systems, the employees who manage and work in these lunch programs are women.

The number of lunchrooms will continue to increase rapidly as more new schools are built and the school population increases. The number of employees also will increase and, in line with the trend in the national

labor market, they probably will be women.

By 1965, the school population is expected to reach 40 million students between the ages of 5 and 17, with an additional 25 million in the 18 to 24 year range. It is quite possible that the expanded lunch program will provide work for at least a half million women.

What about these women? Who are they? Are they single, married or widowed? Why do they work? How old are they? What do they look like? What education, skills and training do they have? How do the accumulated facts about these wom-

en suggest considerations in the planning and equipping of lunchrooms and in training programs?

Two surveys helped to answer some of these questions. One of them, covering 4000 women lunchroom employees, was made in 1956 by Frances Livingston Hoag, at that time chief, school lunch, nutrition division, Department of Public Instruction, Pennsylvania; the other, covering 935 employees, was made in 1959 by Mary Patricia Collins, school lunch supervisor for the eastern area, Louisiana State Department of Education, with Evelyn L. Terrell, Louisiana school lunch director, as consultant. The survey was under the direction of John A. Hunter, dean of student services, Louisiana State University. Data, quotations and extracts of opinions in these surveys constitute the material for this summary.

Who are they? Most school lunch employees are housewives who have one or more children. In Pennsylvania 85 per cent of the women respondents were married and/or widowed. This figure is even higher than the national figure, which is given as 60 per cent.

The return to work by women in their middle or late years has added a new dimension to the nation's total manpower. Working wives now constitute the most rapidly growing group of working women, and this trend will especially affect school lunch personnel. Women who have not worked before and women who return to the labor force after not working outside the home for 15 or more years naturally gravitate to occupations that require skills with which they are familiar.

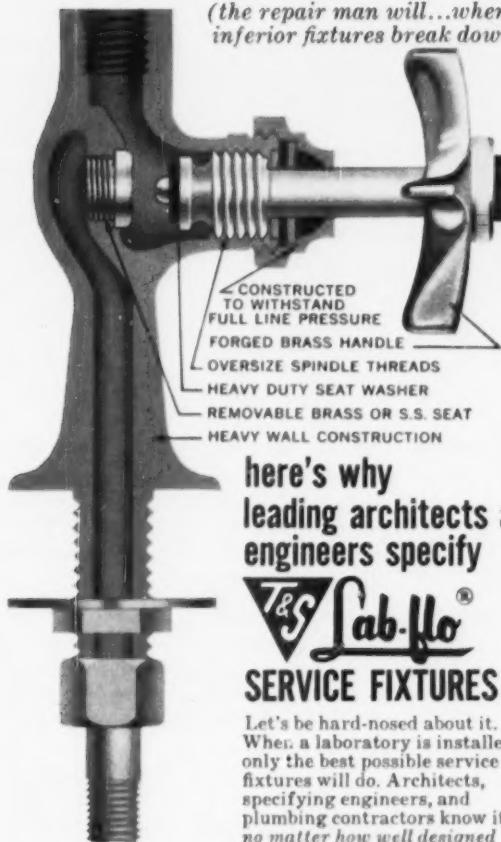
(Continued on Page 106)

CHART 1 shows ages of 4000 school lunch employees in Pennsylvania. Greatest percentage is in 50 to 60 age bracket.



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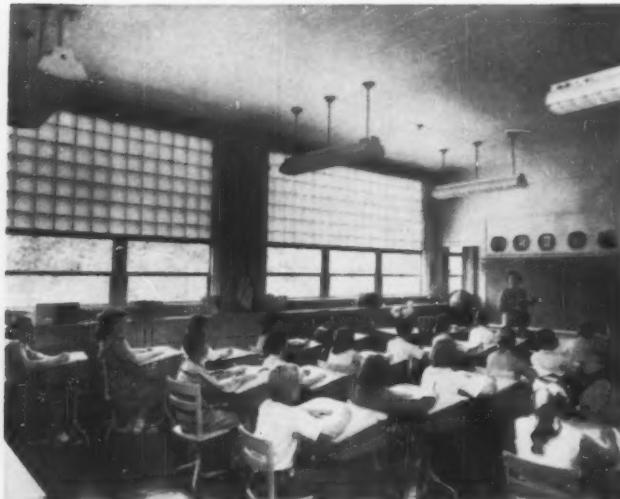
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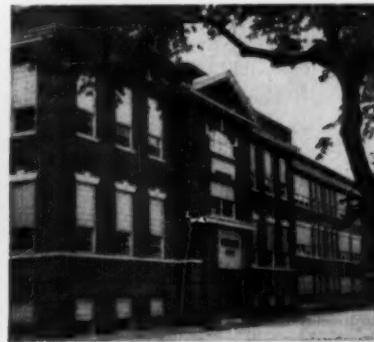
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4. Daniel Burnham School



5. Columbus School

PC CORNING

(Continued From Page 102)

In Louisiana 69.7 per cent of the women surveyed indicated that they were married; 16.5 per cent reported they were widowed. A high per cent of the employees, from 79.5 per cent in the managers groups to 86.2 per cent in the workers groups, stated that they have one or more children.

This survey is in line with the national trend.* Research by the federal government shows that six out of every 10 employed women are married; two out of every five mothers, whose children are of school age, are in the labor force.

Why do women work? There are probably many reasons. One of these is the need for money.

In Louisiana, in addition to children, a total of 411 other persons were dependent for support on the income of school lunch employees.

The income from work in the lunchroom constituted the *only* family income for from 13 per cent (workers groups) to 22 per cent (managers groups) of the women surveyed; the *major part* of the total income for 9 to 15 per cent; *one-half* of the total income for 6.2 to 22 per cent.

The school lunch program may provide work that is near the family home; it fits in with the schedules of

*Womanpower, National Manpower Council, 1957.

the children who are in school; it may provide part-time work; generally, it does not make certain training skills and experience a prerequisite; it appeals to most women who are interested in foods and in programs for the benefit of children.

How old are they? More than half of all women workers are more than 40 years of age, but those in school lunch top this figure. In Pennsylvania 75 per cent of the women were 40 years or more, and 45 per cent were 50 years or more. (See Chart I.)

In Louisiana 39.4 per cent of the women employees in school lunch were between 41 and 50 years of age; 69 per cent were between 36 and 55 years.

School pensions and employment policies affect the employment and dismissal of women at certain ages; nevertheless, most women employed in school lunchrooms throughout the country are middle-aged or older persons.

John C. Stalker, director of school lunch in Massachusetts, says that conditions in that state are typical of those reported in Pennsylvania. Helen Diehl, associate, school lunch administration, New York, has observed that the age range of employees seems to be from 40 to 60 years. Ruth M. Cutter, state director of school lunch, New Hampshire, tabulated the ages of 213 women at a workshop in that

state. She found that 83 per cent were more than 40 years of age; 30 per cent were between 50 and 60 years, and 18 per cent were between 60 and 70 years.

A spot check of 128 women school lunch employees in 14 school districts in New Jersey showed that 60 per cent were more than 40 years of age; 30 per cent were more than 50 years; 3 per cent were between 60 and 70.

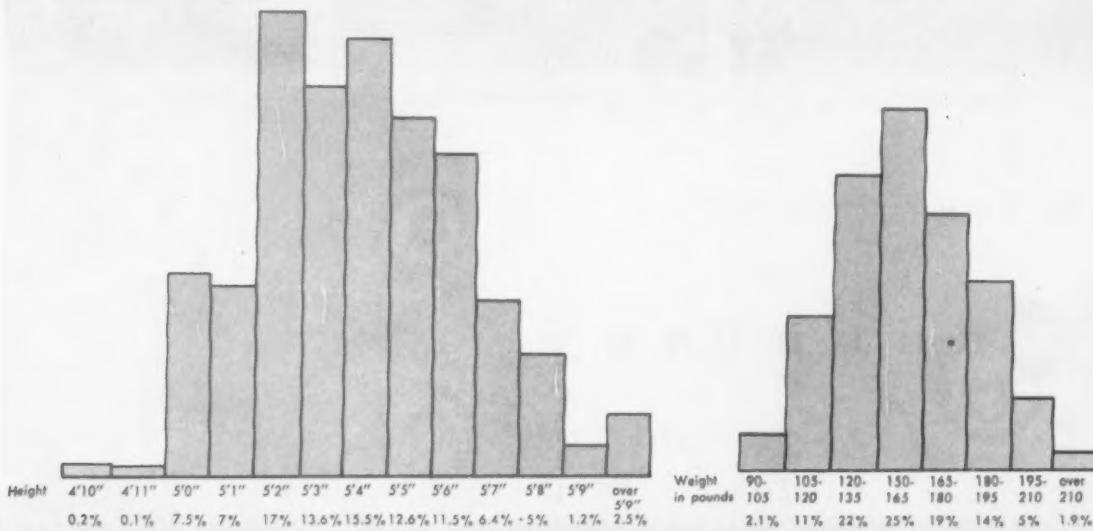
Younger workers are likely to be found in newer industrialized communities where the families are younger; their wages also are likely to be higher. In Dearborn, Mich., for example, in 1958 the average age of 120 lunchroom employees was 44 years and 4 months; 46 per cent were 45 years or more. The age range was from 34 to 67 years.

What do they look like? The Pennsylvania study includes data on the height and weight of women employees in school lunch: 32 per cent were short, under 5 feet 2 inches; 42.5 per cent were medium (5 feet 3 inches to 5 feet 5 inches); 25 per cent were over 5 feet 6 inches; 34 per cent weighed less than 135 pounds; 44 per cent weighed 135 to 165 pounds; 22 per cent weighed 165 to 210 pounds. (See Chart II.)

The largest number of workers seems, therefore, to be short to medium in height and plump to over-

(Continued on Page 108)

CHART II (left) shows height of 4000 school lunch employees in Pennsylvania. Shorter women, 5 feet 2 inches, are largest group . . . **CHART III** (right) shows weight of employees. Three out of four weigh over 150 pounds.





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School Lunch

(Continued From Page 106)

weight in weight. Tables of the Metropolitan Life Insurance Co. for women who are 25 years and more give a weight range of 113 to 145 pounds and a height range of 5 feet 3 inches to 5 feet 5 inches.

Weight is an index of health and can be an important efficiency factor. Food service personnel should be allowed to take school medical health examinations. The New York and New Jersey studies confirm the physical makeup of women personnel to be medium in height and "average to heavy" in weight.

What education, skills and training do they have? The Louisiana study only included information concerning the education of women employees in school lunch. The workers averaged eight years of education; in the managers groups, 25 to 46 per cent had finished high school. Since the number of girls finishing high school has been higher than that of boys for several decades, it is likely that more future employees in school lunch will be high school graduates. Observation and inquiry

suggest similar educational levels in other areas.

With the exception of some managers and home economics teachers who supervise the lunchrooms, employees generally have no training in the lunchroom before they start working. Usually, they have had experience only in preparing food in the home, which may give them a skill that can be utilized for cooking in quantity.

What considerations do these questions and facts suggest about the planning and equipping of lunchrooms and for the training programs? Let us use as an example the typical employee — medium in height, somewhat over the average in weight, and middle-aged or older. If she is to work most efficiently, the following considerations must be given to planning and equipping kitchens:

Muscular strength gradually declines in all persons who are 20 years or more, although individual performance varies.

Kitchens designed for women workers should provide carefully planned work areas. They should be compactly arranged to eliminate, as much as possible, walking, lifting,

reaching, stretching, stooping and carrying. Since two-thirds of the women tend to be "plump," work aisles should be ample for free movement.

When feasible, equipment should be portable or movable, light in color, and easy to clean. Bakery tables, for example, should have roll-under bins. It is almost impossible for women to move and lift the heavy tilt-type bin; hence, an unsatisfactory sanitary hazard may result. Some new refrigerators are now designed so that the entire contents can be removed to a rolling cart. Pass-through refrigerators can conserve walking.

Is the equipment too heavy for employees to handle? Some states have laws that limit the weight loads that may be lifted by women workers. A little consideration of these limitations indicates that a 15 pound potato peeler is the heaviest that women can use. Smaller, rather than larger, models of steam kettles should be used. If the weights of the quantities of liquids and foods required daily in a school system were computed and the lifting limitations were considered, there would be less huge, unused equipment in school kitchens. Sizes of equipment items selected must be kept within the muscular abilities of women.

The selection of pots and pans of a convenient size and shape needs emphasis. Many schools are using plastic and paper pots and pans in increasing amounts because of the lighter weight. Dishwashing racks are frequently too heavy for women to handle, and this work area needs some thoughtful replanning.

Muscular coordination may be affected by aging. All accident hazards should be eliminated. Dangerous overhead pan racks should be replaced with portable models. There should be specifications for marine edges on worktables to prevent spills and subsequent falls. Water faucets near ranges prevent unnecessary walking, carrying and lifting.

Fatigue can lower production seriously enough to affect labor costs. Adequate ventilation of the lunchroom and sound acoustical treatment will relieve fatigue and stress. The added cost of acoustically treated ceilings may well be justified by the improved results. Rubber wheels may be attached to some equipment for movability. (Cont. on p. 112)

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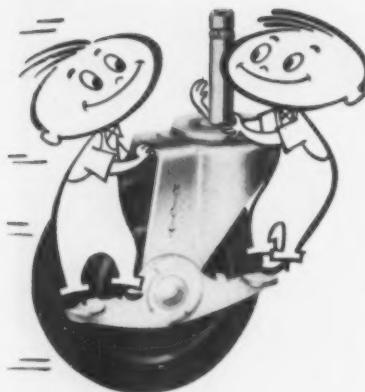
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School Lunch

(Continued From Page 108)

Sink wells often are too low. The most frequent complaint of the women in school kitchens has been that the working level of the sink wells is too low. Many aching backs result in a rapid and costly turnover in the staff. Sinks should be designed so that work can be done without bending.

Power equipment, properly installed and located, pays for itself in a very short period of time and is essential for women workers.

Visual acuity tends to decrease with age. Older workers require a brighter light. Thus all work areas, including the range area, should be well lighted. Recipe cards should be typed, fitted into a container at eye level, and given sufficient light to prevent any errors in reading, as well as eyestrain.

Selection of light colors for use in a kitchen can increase the reflection of light up to 80 per cent. Women especially respond to color in their working environment.

An efficient use of color on the plumbing lines is used by an alert manager in Pennsylvania. She identifies live steam pipes by painting them red; return lines are blue; hot-water lines are green; cold-water lines are white, and traps are yellow. This is very helpful to lagging memories.

One study reports no change in color perception as women become older. Therefore, color still can be used effectively to prevent accidents. Painting handrails and edges of steps leading to a lower-level storeroom with luminous paint effectively increases visual acuity.

Middle-aged women can be safeguarded from strain if the safety levels and work areas are painted light green, and the dangerous levels of reaching, lifting or stooping are painted with varying hues of red or rose.

Education at all levels of food services is essential. The educational implications are clear. Training programs at all levels through all available agencies are essential if school lunch service is to be established as an integral part of the educational system. Combined with lunchroom experience, training in the skills of simple management procedures can be given in inservice training, in pre-

service training in vocational schools, and in adult education courses. This should appeal to the large number of high school graduates who will not go to college.

Colleges must be depended upon to provide administrators with a sufficiently broad understanding of food service. Administrators must provide leadership in nutrition education as well as supervision to the school program as a whole.

To meet the demand and urgent need for qualified professional supervisors, state departments of education can cooperate with colleges and local districts by providing an apprenticeship program for cafeterias.

Qualified supervision is especially desirable for training and handling this growing labor force of older women. Training programs, directions given to employees, and the supervision and planning of schedules all require a knowledge and understanding of the physical abilities that are likely to decline with age.

Supervisors must consider mental and verbal abilities of employees. Mental abilities vary greatly in the extent to which they change with age. Verbal abilities change little, but the ability to learn facts and practices that conflict with past habits is reduced. Speed of individual mental reaction declines significantly. All of these factors must be considered by the supervisor.

School lunch is important field for women with no specialized training.

In summary, the school lunch program is one of the most important fields for the employment of married women. It is of special value for those who must work near their homes, and have no specialized training or experience when employed. They are likely to be among the increasing number of women who are 40 years of age or older in the labor market. This age group is increasing rapidly, and it is from this group that problems of mental health and public assistance frequently arise. However, these problems may be avoided by happy, useful employment in a field in which they have interest and feel competent. The lunch program thus may be of value in the solution of social as well as economic problems.

In addition, information concerning lunchroom employees is essential for successful planning and operation of school food services.

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School Law

(Continued From Page 91)

In Indiana, for example, when a school trustee entered into a contract with an architect after the advisory board had accepted the architect's plans, the legality of the contract was questioned on the ground that it was not prepared or approved by the advisory board as required by statute. The court, in upholding this contention, held there could be no recovery, saying:

"In the face of the statute . . . which provides that no debt of the township can be created except by the advisory board, and in the manner prescribed by the statute, there can be no recovery against the township. . . . If so, a township trustee, by ignoring the statute, could bring about its nullification."¹⁰

In another case, a Missouri court also was concerned with the question of whether the contract was in accord with the statutes.¹¹ The statute required that contracts be approved by a majority of the board. In this case the board consisted of six members. At the meeting at which an architect's contract was approved, five members were present. Three of the members voted in favor of approving the contract, but the president did not vote. He announced, however, that the motion carried.

The court held his announcement was equivalent to a favorable vote, saying: "The assent of the president was not evidenced by mere passivity, but by active participation in declaring the motion carried and in signing the contract." Consequently the court held the contract was legal, and the architect could recover even though the board repudiated the contract and made use of another architect.

Another principle of law is that a board can take action only at a regular meeting or a special one of which

¹⁰Dierks Special School District *v.* Van Dyke, 237 S.W. 428, 152 Ark. 27 (1922); Spalding County *v.* W. Chamberlin and Co., 61 S.E. 553, 130 Ga. 649 (1908); Cobb *v.* Pasadena City Board of Education, 285 P. (2d) 41 Cal. (1955); Gaddis *v.* Barton School Township of Gibson County, 164 N.E. 499 Ind. (1929); Oberwarth *v.* McCleary County Board of Education, 121 S.W. (2d) 716, 275 Ky. 519 (1938); Burk *v.* Livingston Parish School Board, 182 So. 656, 190 La. 504 (1938); Bonsack and Pearce *v.* School District of Marceline, 49 S.W. (2d) 1085, 226 Mo. App. 1238 (1938); Rapp *v.* Board of Education of City of Las Vegas, 284 P. 761, 54 N.M. 526 (1927); Windrim *v.* The City of Philadelphia, 9 Philadelphia 550 Pa. (1872).

¹¹Graddis *v.* Barton School Township of Gibson County, 164 N.E. 499 Ind. (1929).

¹²Bonsack and Pearce *v.* School District of Marceline, 49 S.W. (2d) 1085, 226 Mo. App. 1238 (1938).

all members have had notice. When it could not be shown that an architect was employed at such a meeting, an Arkansas court failed to recognize his contract.¹²

In this connection it should be pointed out that a legal contract made with an architect by a school board will be held binding on a succeeding board.¹³ This follows from the fact that the board is a continuing body and does not lose its identity as a result of changes in membership. This rule is applicable even though the entire contract is not to be completed at once, but part of it is to be performed in the future.

An Oregon court, for example, upheld the legality of an architect's contract to plan an entire building, part of which was to be completed at the time and part in the future.¹⁴ In support of its position, the court said: ". . . a contract which is valid at the time of its execution could not be invalidated by subsequent events over which the plaintiff, a party to the contract, had no control."

On the other hand, it has been held that a school board cannot bind future boards so that an architect could be retained for further work at some future undetermined date.¹⁵

In Michigan, however, it has been held that when an architect completed the task of drawing plans, he was entitled to be paid even though the board did not utilize the plans immediately — the plans would always be available.¹⁶

While a change in the personnel of a board does not affect the legality of a contract, the same is not necessarily true of a change in the personnel of an architectural firm. Thus, where a board of education entered into a contract with a firm of architects which provided that the board could exercise its choice in determining which one would supervise the construction of the building, and one architect retired and was replaced by

(Continued on Page 116)

¹³Dierks Special School District *v.* Van Dyke, 237 S.W. 428, 152 Ark. 27 (1922).

¹⁴Llewellyn *v.* Board of Education of Cicero-Stickney Township High School District, 154 N.E. 899, 324 Ill. 254 (1926); Altman, for the Use of Frost *v.* School District of City of Uniontown, 1 Fay L. J. 211 Pa. (1938) (affirmed 5 A. (2d) 896, 334 Pa. 336 [1939]; Jacobberger *v.* School District No. 1, 256 P. 652 Ore. (1927).

¹⁵Jacobberger *v.* School District No. 1, 256 P. 652 Ore. (1927).

¹⁶Berlinghof *v.* Lincoln County, 257 N.W. 373 Neb. (1934).

¹⁷Tasener *v.* Elk Rapids Rural Agricultural School District, 67 N.W. (2d) 136, 341 Mich. 244 (1954).



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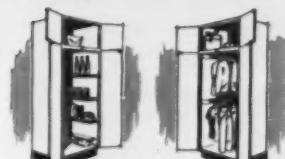
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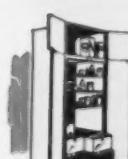
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(Continued From Page 114)
another, a Kansas court held that the dissolution of the partnership was sufficient cause for the board to rescind the contract.¹⁵

The court reasoned that the contract was one for professional and personal services and "the board was not bound to accept the professional services of any other or others than the two architects composing the original firm with whom it made the contract."

Legality of Oral Contract. In the absence of any statute requiring that a contract for the services of an architect be in writing, the courts will declare oral contracts to be legal.¹⁶ In this connection it has been held that where the statute required all contracts in excess of \$500 to be in writing, an oral contract for \$467.30 was legal.¹⁷ Likewise, in Pennsylvania it has been held that where a statute required all contracts for construction work in excess of \$300 to be in writing, the same was not applicable to contracts with architects.¹⁸

On the other hand, if the statute requires that the contract be in writing, the courts will, as a rule, treat an oral contract as ineffective.¹⁹ In Georgia where it has been so held, the court in commenting on this rule said:

To meet the requirements of the statute . . . all the material portions of the contract actually made should be in writing and in the minutes; and, if the county employs any one to perform services and a price is agreed upon, this should appear in the contract or the minutes. If the compensation is agreed upon, but omitted from the record in the minutes, the contract is not in writing and on the minutes, but only a portion of it.²⁰

In considering the legal effect of a written contract, it is well to point

out that the courts will not permit the introduction of parol (oral) evidence to contradict such a contract. Nevertheless, they will permit its introduction to explain or clarify a contract whose meaning is not clear.²¹

In this same connection it has been held that in interpreting a contract, as it appears in the minutes, parol evidence may be introduced to "supply any omitted fact or action to supplement the written record of the school board in order that the action taken and things done might fully and truthfully appear."²²

In Kentucky, in a different sort of case, it was held that where the statute required that the county superintendent approve in writing all contracts made by the county board of education, his failure to give his approval in writing to an architect's contract was a fatal defect.²³

Nevertheless, it has been held that recovery under such a contract may be had under *quantum meruit* if its legality is not questioned until after it has been completed. In so holding, a Louisiana court said: "Neither law, equity nor good conscience will allow one to claim the benefits and at the same time escape the obligations of an undertaking."²⁴

Architect Presumed To Know Board's Authority. One who deals with a quasimunicipal corporation, like a school district, does so at his own peril. Courts are in agreement that such a one is charged with a knowledge of the corporation's authority, and if he acts mistakenly he must suffer the consequences.²⁵ This means that the architect must inform himself with respect to the limits placed by law upon the corporation's power to contract.

Responsibility Under Contract. On numerous occasions actions for dam-

(Continued on Page 120)

¹⁵Smith v. Board of Education of City of Liberal, 222 P. 101, 115 Kan. 155 (1924).

¹⁶William S. Drumney, Inc. v. City of Cambridge, 184 N.E. 458, 282 Mass. 170 (1933); Hogan and Slattery v. City of New York, 100 N.Y.S. 68, 114 App. Div. 555 (1906); Kline v. School District of Longswamp, 35 Berks 181, 55 Mun. 17 Pa. (1943).

¹⁷William S. Drumney, Inc. v. City of Cambridge, 184 N.E. 458, 282 Mass. 170 (1933).

¹⁸Kline v. School District of Longswamp, 35 Berks 181, 55 Mun. 17 Pa. (1943).

¹⁹Spalding County v. W. Chamberlin and Co., 61 S.E. 535, 130 Ga. 649 (1908); Oberwarth v. McCrory County Board of Education, 121 S.W. (2d) 716, 275 Ky. 319 (1938); Burk v. Livingston Parish School Board, 182 So. 656, 190 La. 504 (1938); Rapp v. Board of Education of City of Las Vegas, 284 P. 761, 34 N.M. 526 (1927).

²⁰Spalding County v. W. Chamberlin and Co., 61 S.E. 535, 130 Ga. 649 (1908).

²¹Bair v. School District No. 141 of Smith County, 146 P. 347, 94 Kan. 144 (1915).

²²Bonsack and Pearce v. School District of Marcelline, 49 S.W. (2d) 1085, 226 Mo. App. 1238 (1932).

²³Oberwarth v. McCrory County Board of Education, 121 S.W. (2d) 716, 275 Ky. 319 (1938).

²⁴Burk v. Livingston Parish School Board, 182 So. 656, 190 La. 504 (1938).

²⁵Perkins v. Newark Board of Education, 161 Fed. 767 (originating in N.J.) (1908); Jamison v. City of Paducah, 241 S.W. 327, 195 Ky. (1922); Oberwarth v. McCrory County Board of Education, 121 S.W. (2d) 716, 275 Ky. 319 (1938); Pierce v. Board of Education of Union Free School District No. 12, 211 N.Y.S. 788, 125 Min. Rep. 589 (1925); Laing v. School District No. 10 of Jackson County, 224 P. (2d) 928 (1950).

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(Continued From Page 116)
ages have been brought against architects because of dissatisfaction with the product of their labors. In such cases the courts appear to agree that an architect owes his client the duty of loyalty and good faith, but that he is not a warrantor of his plans and specifications.²⁶ In commenting to this effect, a Michigan court said:

"This court has held that the responsibility of an architect does not differ from that of a lawyer or physician. When he possesses the requisite skill and knowledge and in the exercise thereof has used his best judgment, he has done all the law requires. The architect is not a warrantor of his plans and specifications. The result may show a mistake or defect, although he may have exercised the reasonable skill required."²⁷

With respect to the task of supervising construction, the situation is somewhat different. In cases involving this matter, the courts have held that the architect must exercise care to avoid liability for negligence.²⁸ A California court stated this rule as follows:

"An architect, when supervision is a part of the duties assumed by him under his contract with the owner, is required to exercise due care in the performance of his supervisory function and is liable to the owner for negligence on his part."²⁹

One case is particularly interesting because it concerns the amount of supervision that the architect must provide during the period of construction.³⁰ When a gymnasium ceiling was damaged because of faulty construction, a school district sued the contractor, architect and a surety company for damages.

In holding that the architect was not liable, the court stated the general rule that the amount of supervision required by the architect so as to absolve himself from negligence should be determined by the provi-

²⁶Looker *v.* Gulf Coast Fair, 81 So. 833, 203 Ala. 42 (1919); Palmer *v.* Brown, 273 P. (2d) 306, 127 Cal. App. (2d) 44 (1954); Kortz *v.* Kimberlin, 165 S.W. 654, 158 Ky. 566 (1914); Major *v.* Leary, 268 N.Y.S. 415 (1934); Surf Realty Corp. *v.* Standing, 78 S.E. (2d) 901, 295 Va. 451 (1953); Bayne *v.* Everham, 163 N.W. 1002 Mich. (1917).

²⁷Bayne *v.* Everham, 163 N.W. 1002 Mich. (1917).

²⁸Palmer *v.* Brown, 273 P. (2d) 306, 127 Cal. App. (2d) 44 (1954); Kortz *v.* Kimberlin, 165 S.W. 654, 158 Ky. 566 (1914); Board of Education of Central School District No. 1 *v.* Mathew L. Carroll, Inc., 157 N.Y.S. (2d) 775 (1956).

²⁹Palmer *v.* Brown, 273 P. (2d) 306, 127 Cal. App. (2d) 44 (1954).

³⁰Board of Education of Central School District No. 1 *v.* Mathew L. Carroll, Inc., 157 N.Y.S. (2d) 775 (1956).

sions of the contract as well as by the custom and practice in the community. In this particular case it held that all that was required was a weekly visit and said:

"While it is true that a daily or more frequent attendance and inspection might have disclosed the omission of the [layers of] felt, it is undisputed that the obligation to supervise was met and discharged when the architect made adequate weekly supervision."

In at least one case the courts have ruled on the question of the tort liability of an architect. This was an action for damages brought by one injured as the result of the alleged negligence of an architect. The court refused to hold the architect liable on the ground that he was acting as the agent of his employer.³¹ It should be noted that this case, brought in Iowa, did not involve a school district. If it had, the decision might have been different, as school districts generally are not held liable for the negligence of their agents. Under the common law rule, school districts, as agents of the state, are held to be immune from liability for injuries resulting from the negligence of their officers, agents and employees.

Finally, with regard to the responsibility of one who contracts with the architect: One may breach his contract only for good cause; dissatisfaction has been held not to be sufficient reason for so doing.³²

Part Two of this series of articles will discuss the statutory and contractual authority of the architect in his relations with the school system.

³¹Manton *v.* H. L. Stevens & Co., et al., 153 N.W. 87, 170 Iowa 495 (1915).

³²Gould *v.* McCormick, 134 P. 676, 57 Wash. 61 (1913).

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'The School Business Administrator'

(Continued From Page 96) school business administrator is needed, the scope of the work to be performed must be carefully outlined, the book counsels. These suggestions are made: Assistance can be obtained by the superintendent and the board from school staff and lay citizens. But first the superintendent needs to build a climate of acceptance with the board, the school staff, and the public.

Before recruitment is started, these three procedures should be followed: (1) Define the functions to be performed; (2) establish the structural organization, lines of responsibility, and staffing requirements necessary to perform those tasks, and (3) delegate authority commensurate with the responsibilities assigned, making provision for special assignments.

Filling the Position. After a school district has decided to employ a business administrator, has defined his tasks, and has established a suitable administrative organization and staffing patterns, it sometimes has difficulty in finding the desired individual.

For this reason, one entire chapter of "The School Business Administrator" is devoted to 14 technics of recruitment of school business talent, followed by a discussion of the relative merits of the different types of procedures.

Salary of the Business Administrator. The committee does not state what the salary of a business administrator should be, but it does indicate ranges and averages being paid according to a 1959 A.S.B.O. survey.

Tabulations show results of the survey, arranged on the basis of assessed evaluation, enrollment and number of schools. In the United States, salaries ranged from \$3390 to \$27,156; in Canada, from \$4200 to \$17,000. Comparisons are made difficult by the large number of job titles used to describe the school business administrator's duties; this underlines the fact that there are substantial differences in job responsibilities included in the study.

The salaries of business administrators usually are negotiated on an annual basis, except where salary sched-

ules are used for all positions. The book considers that because of the time (12 months employment) and responsibility factors, a ratio of the superintendent's salary is a sound basis for initial determination of the business officer's salary.

Where schedules are used, these most frequently provide for a base salary plus five annual increments or steps related to the increments paid to other staff members. The salary of school business officers appears to be advancing more rapidly than those of other school staff members, and such a salary usually is among the top two to five paid by the school system.

The text stresses that each school district must determine its own salary ranges, being guided by sound salary principles which will promote good staff relationships, attract and retain competent persons, and promote increased efficiency and continuing educational benefits. Consultation with the state offices of education, universities, and the research services of educational organizations is urged. Emphasized is the point that, by virtue of efficient and economical administration of school business affairs, a competent school business administrator can save his entire salary many times over.

Code of Ethics. The final chapter reproduces the most recent statement of the A.S.B.O. relative to the conduct of school business officials.

Also included in the volume are three pages of selected bibliography and separate sample resolutions for creating and filling the position of school business administrator.

For each chapter there is a list of self-study questions geared to the chapter heading.

A Growing Project. In a "postlude," Executive Secretary Charles W. Foster observes that the publication was four years in the making: two years of dreaming, and two more years of work on it. Dr. Foster considers this original publication a "springboard" from which to consider the problems involved. Recognizing the need to keep a volume of this type up to date, he invites readers to forward their suggestions for improvement to him for careful consideration before the next, and possibly enlarged, edition is published. — L.E.B.

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A Plan for 'Trainables'

(Continued From Page 74)

tion of knowing that when the child leaves school at 16 or later he could go to the Community Center's sheltered workshop. There he would be trained in certain skills by day, perhaps modestly remunerative skills, and would find recreation in the evening.

Another official made happy under a Community Center setup would be the administrator of the state institution, since his overcrowded and per-

haps underbudgeted facilities would be relieved of admitting children who could receive more suitable instruction and care close to home. Indeed, the Community Center would serve as Halfway House — for children and adults being released from the institution and for others being admitted.

The immediate cost to the state of the Community Center system would be large, Dr. Kirk admits. In the long run, however, the cost would be less, as more children would remain under the parental roof.

Even if a Community Center pro-

gram were activated locally, citizens could decide to have additional classes for the trainable inside the public school walls. In fact, in large cities both types of service to the trainable might exist logically and compatibly side by side, in Dr. Kirk's view.

A stream of new research literature on the subject of trainables is emanating from Illinois and other university services. Next to come from the Illinois Institute will be Lawrence M. Stolzow's manual on teaching machines. This type of automation, he expects, "will provide a new orientation to research on the learning problems of the retarded and shed new light on old problems." In fact, he will present some evidence to show that this is already taking place. ■

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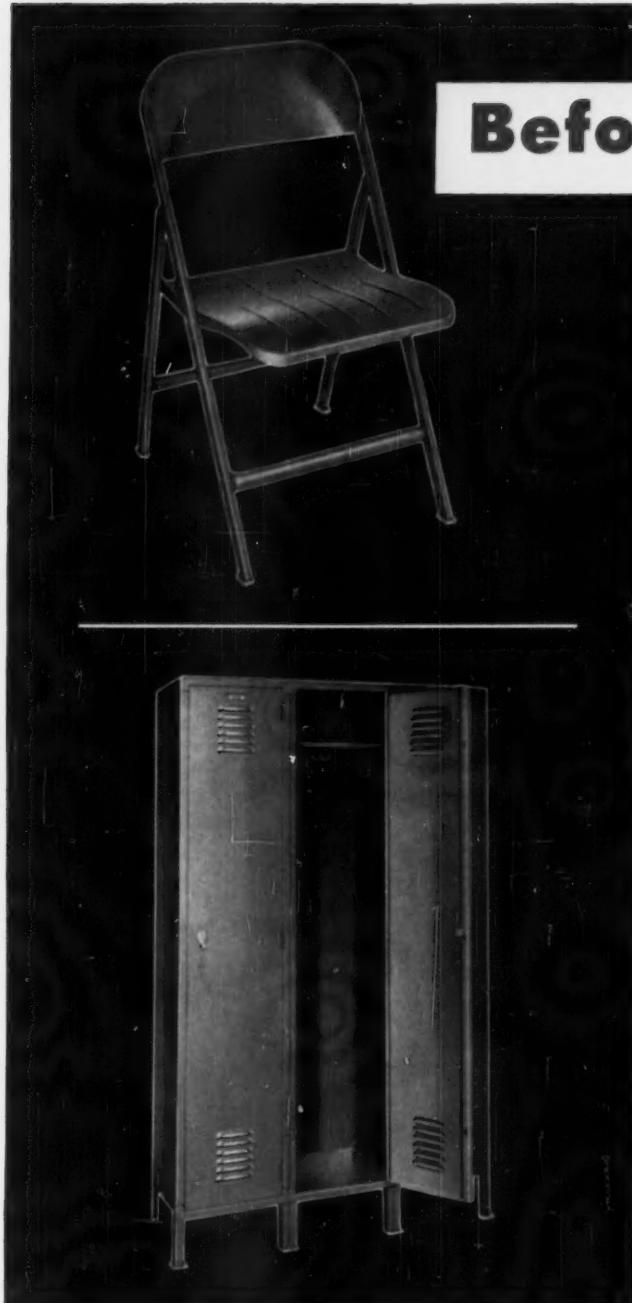
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They No Leica. School officials and photographers who allegedly make under-the-table deals have been scolded by the Professional Photographers of America, Inc., at the group's annual exposition in Chicago. "Such conduct," says the resolution, "is unbecoming to the profession of photography and is a violation of the profession's code of ethics." The group is urging school officials to take action against staff members who "accept things of value from photographers" in exchange for negotiating contracts.

He Faces Problems. A new minister of education has been appointed for Israel. He is Abba Eban, former U.N. representative and ambassador to Washington. A pressing problem in Israel's schools is a threat by elementary teachers to disrupt schooling if high school teachers leave the teachers' union to form their own trade union. Immigrants of diverse ethnic and cultural backgrounds also present a challenge to the new minister. The school population increase from 130,000 to 600,000 in the last 12 years is another.

On the Level. Because of a shortage of classroom space in Levittown, N.Y., children there are attending a split-level kindergarten. Once a private home, the building was included in the purchase of a 10 acre tract of land that was to be the site of a new elementary school. When funds for the school's construction were not approved, the school district converted the interior of the building into two large classrooms. It has its good points, according to Supt. Fred Ambellan. "It gives a small, contained environment, and it makes a good transition for the youngsters from home to a big school."



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By EDGAR FULLER

POSITION PAPER outlines Nixon's program for education. Compared here with Kennedy's basic approach.

The respective positions of the presidential candidates and their parties on the federal role in education is reasonably clear in outline, but complicated in important details.

Late in September, H.E.W. Secretary Arthur S. Flemming held a press conference at the Washington headquarters of the Republican National Committee to release a "position paper" on behalf of Vice President Richard M. Nixon. It was described as "outlines of an imaginative and workable federal program in support of education." We will discuss significant positions taken by this paper, with occasional references to positions taken on the same issues by the Democratic candidate, Sen. John F. Kennedy.

Mr. Nixon's basic approach is ". . . a program measured not by how much money is spent or how fast, but rather by its effective impact in stimulating and supplementing local and private efforts." Senator Kennedy's basic approach is to spend larger amounts of federal funds to meet the needs of education as determined by the states.

Fundamentally, the Republican position is to choose federal purposes carefully, use relatively small funds to pinpoint areas of education federally determined to be in need of assistance, and then to direct the federal funds to the point of need through the states to local school districts in a carefully regulated manner.

The fundamental Democratic position is to use relatively larger amounts of federal funds, to prescribe federal guidelines for their expenditure in more general terms, and then to leave for state determination the purposes for which the funds can best be used in the schools.

Report
from WASHINGTON

Photo by Harris & Ewing, Washington, D.C.



PENNSYLVANIA AVENUE

NIXON opposes federal funds for teachers' salaries, but favors funds for school bonds, science aids, and federal impact areas.

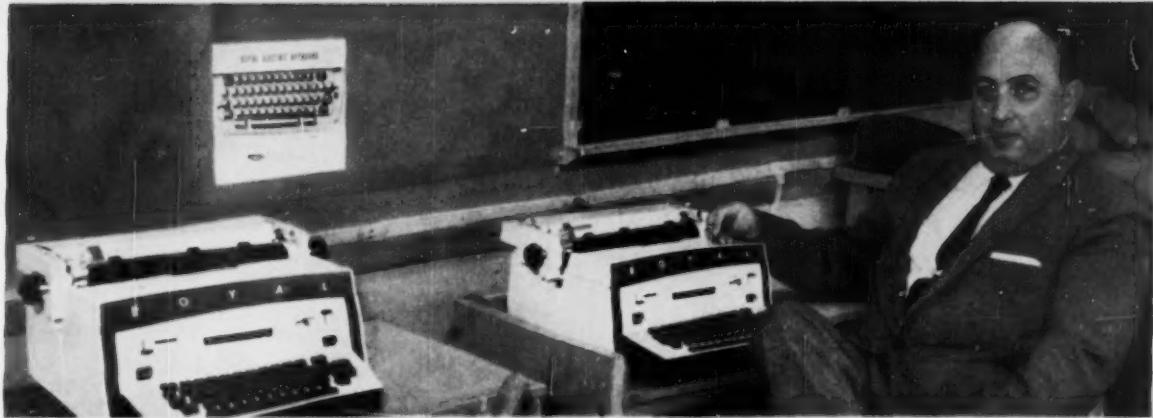
Vice President Nixon's position paper proposes: ". . . earmarking federal funds (1) for servicing debt already incurred in some local districts; (2) for servicing debt incurred for new construction in other areas, and (3) for grants which, when matched with state funds, will enable the construction of new buildings to go forward on a pay-as-you-go basis."

Concern about "federal control" leads Vice President Nixon to oppose federal funds for teachers' salaries. For salary increases, which the Vice President favors, he would rely upon local tax funds that would become available following federal assumption of partial responsibility for school construction and capital debt.

The position paper makes some exceptions in its disapproval of federal funds for current educational expenditures. Most important is the specific exception in favor of school districts burdened by federal activities. Since 1950 these districts, which enroll 25 per cent of all public school pupils, have received federal payments of \$1,025,947,000 for public school construction and \$1,132,810,000 for public school teachers' salaries and other current expenses. Also exempted by implication, according to information from the H.E.W. Department, are possible extensions of National Defense Education Act authorizations for items of current expense, such as

(Continued on Page 130)

SCHOOL BUSINESS MGR. M. PEARLSTONE



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Saves teaching time—hours needed for on-the-road instruction in dual-control car can be cut in half, still meet required standards.

Cuts costs per pupil—training more students in less time, *without* increasing the teaching staff, results in measurable economy.

The Drivotrainer system was originally developed as a public service by the Aetna Casualty and Surety Company through extensive work with a panel of nationally known educators. To carry this program forward, Rockwell Manufacturing Company is now producing and distributing the Drivotrainer for use in schools as well as for application in the re-training of experienced drivers. For further information on the Drivotrainer installation best suited to *your* needs, write: Rockwell Manufacturing Co., Drivotrainer Division, 403L N. Lexington Ave., Pittsburgh 8, Pa.



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Report From Washington

(Continued From Page 126)

materials and equipment for instruction in science and modern foreign languages. The policies of the position paper apparently apply solely or primarily to new legislation.

Following the Flemming news conference, differences of opinion remained on several aspects of the proposals. For instance, one nationally circulated newspaper reported that Mr. Nixon supported no more than federal payments for part of the interest costs on school bonds, and would leave the entire principal debt to be paid locally. Another newspaper reported that both principal and interest were covered. Specific inquiry reveals that the Vice President intended his proposal to include *both* principal and interest.

NO DETAILS offered on federal restrictions or preservation of state and local autonomy.

Whether legislation along these lines would be feasible and useful depends on details not spelled out in the position paper. If the federal statute leaves to the states determination of questions, such as the eligibility of local school districts under general federal guidelines, the proposal could reduce indirectly the

local expenditures for education so that local districts might choose to increase the salaries of teachers from the local tax leeway gained.

On the other hand, should the statute specify rigid federal requirements, such as proof of poverty in local school districts as a prerequisite for establishing and maintaining their eligibility to participate, the proposals probably would fail. This was the reason for the failure of the red-tape bound measures proposed by the Administration during the term of H.E.W. Secretary Oveta Culp Hobby. Such legislation would have little chance of enactment.

We have no way to ascertain whether the insistence of the present Administration in attaching restrictive amendments to educational legislation would be continued under a Nixon administration. Real assistance with preservation of state and local autonomy requires state and local freedom, and bars such federally imposed conditions. This necessity for helpful federal legislation does not fit easily into the fundamental approach of the position paper, which measures the success of federal assistance "... by its effective impact in stimulating and supplementing local and private efforts."

The great importance of these points should be widely understood. The states called for the defeat of the ill fated

Hobby legislation almost unanimously. In their view, it prescribed so much red tape that the small federal funds available to stimulate school districts to do more for themselves were not believed to be beneficial to education.

Federally required changes in state and local educational policies and practices, proposed in the name of stimulation, could prevent enactment or acceptance of substantive federal assistance to the schools. The question is the extent to which the new President and Congress might be willing to forego federal controls and appropriate enough funds to achieve the purpose of releasing local funds for higher salaries.

FAVORS MORE SUPPORT for higher education, including building funds for church related colleges and universities.

The Nixon position paper proposes increased federal funds for higher education, including a sharp departure from current practice in the federal support of church related colleges and universities. In the press conference Secretary Flemming appeared to be more enthusiastic about this portion of the report than about the recommendations for elementary and secondary schools.

All types of colleges and universities already share in federally supported programs, such as those for scholarships, fellowships, institutes for teachers, research contracts, and federal loans at low interest rates for construction of housing facilities. These are aids to individuals rather than to institutions, or contracts to achieve a defined task for the federal government, or loans to be repaid. The Nixon proposal would extend federal grants to all types of colleges and universities for the construction of physical facilities, such as classrooms, laboratories and libraries.

This raises new questions of constitutional law and also questions of public policy concerning separation of church and state. The reason for the operation of educational institutions by churches is to integrate a particular theology or religion into all teaching of subjects and other activities of the institution. Even restrictive covenants in the title to the property constructed with federal funds, under these conditions, leave it owned and used for religious purposes.

Secretary Flemming, with a background of teaching and administration in denominational colleges and universities, was "absolutely certain" in the press conference that it is constitutional to supply funds for construction of permanent facilities in sectarian colleges and universities. Disagreement with this conclusion is widespread.

The constitutional question has never been squarely before the federal courts, (Continued on Page 132)

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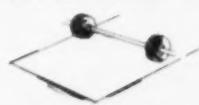
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Report From Washington

(Continued From Page 130)

and the burden of proof is on those who believe it is unconstitutional to use public funds to construct real property owned and controlled by a church or church related educational institution. Presentation of the issue in a proper case is itself difficult. It is possible that the issue may be resolved on the basis of public policy without recourse to the courts.

Outright grants to church related colleges and universities for buildings may be a factor in the enactment of legislation affecting all colleges and universities. "We need them all," said Secretary Flemming in the press conference, implying that federal funds for capital outlay as well as for the present federal aids of undoubted constitutionality are necessary for church related institutions.

KENNEDY interprets federal aid to any church or its schools as unconstitutional.

Senator Kennedy's point of view on this issue appears to cover both law and public policy. He says: "There can be no question of federal funds used for support of parochial or private schools. It's unconstitutional under the First Amendment as interpreted by the Supreme Court. I am opposed to the federal government's extending support to sustain any church or its schools."

On the constitutional question, differences between secondary schools and colleges may or may not be enough to bring them under different principles of constitutional law. In any event, when public funds are expended for real property with legal title and control in a church or church controlled institution of higher education, the question about using public funds for building church schools at the secondary level naturally arises.

So far as public policy is concerned, the two situations obviously are difficult or impossible to separate.

NIXON proposes national commission on education to advise the President. Appointments might be political.

The Nixon position paper makes the following suggestion: "... to make sure of sustained concern for the problems of education and sustained support for effective action, I think we should organize a permanent top-level Commission on Education to advise, directly, the President and the Secretary of Health, Education and Welfare. Such a commission should provide a continuous evaluation of what is being done in every field of education, and also it should identify what is not being done

that should be. It should help focus the interest of all Americans on the quality of our total educational effort, from kindergarten to graduate school."

The President presumably would appoint the new commission, but there is insufficient information in the proposal for its complete evaluation. Should these missions be supplied in accord with sound educational principles, the proposals would be well received in the educational community.

Experience in Washington with educational commissions appointed by political officials to advise political officials on education has been decidedly unhappy so far as the public schools are concerned, because they recommend too much political control and too little education. The same has been the usual experience in the states with the so-called "little Hoover commissions," appointed by political officials to advise political officials on education at the state level. After close examination, Congress and the state legislatures have consistently refused to enact the proposals that most nearly characterize these commissions at both levels of government.

Policies of the leading educational organizations have long favored a federal structure for education that would place the U.S. Commissioner in the position of being the chief educational officer of the federal government. They have recommended an independent or semi-independent agency in which the U.S. Office of Education would operate under a commission or a board of lay citizens, handle its own business before the Bureau of the Budget and Congress, govern its own public relations, and not be subject to any politically appointed officer below the President. This would parallel accepted structure and practice at the local and state levels in education, and would go far to ensure that educational considerations would receive proper attention.

An advisory commission or board of laymen might be established as a compromise first step in the direction of these policies. If the U.S. Commissioner of Education could be made its executive officer, and the power to appoint the U.S. Commissioner be left to the President, the arrangement probably would be supported as a semi-independent agency by school people generally.

The policy of the chief state school officers and most educators, of course, would favor eventual appointment of the U.S. Commissioner of Education by the commission or board composed of lay citizens. Such a system would retain sufficient influence in the federal government over its educational agency, and at the same time it would allow a measure of freedom from direct political control of education from Washington. ■

NEWS IN REVIEW

Something New in Store for A.A.S.A. Regional Meetings: Teams Will Explore Disciplines Related to Education

WASHINGTON, D.C. — The formats for the 1961 regional conventions of the American Association of School Administrators will "depart from formats of the past," according to Executive Secretary Finis Engleman. At four of the seven general sessions, "speaker-analyst teams" will explore disciplines related to education, reported Dr. Engleman recently. Each member of each team will look at a particular discipline from a different point of view, he said.

The topics to be viewed, announced by A.A.S.A. President Forrest E. Conner, superintendent of schools, St. Paul, Minn., will be: economics, mental health, political science and government, and social anthropology. Speakers will highlight recent developments in their respective fields, but will make no comment on the implications for education.

N.S.B.A. Convention To Stress Educational Leadership

CHICAGO. — The theme of the 1961 convention of the National School Boards Association will be "Responsible School Boards Provide Educational Leadership." In explaining the theme, President Roy O. Frantz said that it is not enough to defend local control [of education] as a good in itself, regardless of how it is exercised. If the citizens of America are to retain their legal voice in education, that voice must be expressed with insight, courage and responsibility by the local boards of education who represent the citizens, he said.

W. A. Shannon, executive director of N.S.B.A., told *The Nation's Schools* that the keynote speaker the association hoped to present would be "distinguished," and that such topics to be discussed would include "Are We Attempting To Teach Too Much?" and "Is Local Control of Education Obsolete?"

The convention will be held in Philadelphia, May 4 to 6, 1961.

Associated Exhibitors, N.E.A., Plan Expanded Services

OTTAWA, ILL. — An expanded program of service is envisioned by the officers and directors of the Associated Exhibitors of the N.E.A.

Roger M. Warren, the organization's secretary-treasurer, reports that at the fall meeting of the board of directors,

the analyst member of the team, a school administrator, will then explore implications of these developments for education.

The international scene will be given priority at another of the general sessions. Educators from Great Britain, Asia Minor, Central Europe and the Far East will report on progress in education being made in their countries.

The A.A.S.A. architectural exhibit and the educational exhibits will be shown at each of the 1961 regional meetings to be held in San Francisco from February 25 to 28; in St. Louis from March 11 to 14, and in Philadelphia from March 25 to 28. The annual open business meeting will be held in St. Louis, where reports from the audit committee, the resolutions committee, and others will be read for approval.

held recently at Starved Rock State Park Lodge near here, the threefold purpose of the organization was defined as follows: the upgrading of exhibits at this year's three regional meetings of the American Association of School Administrators, the striving for ever better relations with educators, and the improvement in the designs of tools of education manufactured and supplied by the member companies.

As has been the custom for many years, the Associated Exhibitors again will underwrite the program of entertainment to be presented on the Tuesday night of each A.A.S.A. meeting. At that time, too, presentation of the 1961 American Education Award will be made.

Surplus Property Available to Schools in Rural Areas

WASHINGTON, D.C. — Schools in many rural areas could benefit by taking more advantage of the federal surplus property program, Bertha S. Adkins, undersecretary of Health, Education and Welfare, recently reported to the committee for rural development program.

A variety of equipment and supplies — and occasionally land and buildings — are available under the surplus property program to eligible public and nonprofit educational institutions. Yet many schools, especially in the rural areas, are not aware of the program or how to take advantage of it, she said.

Property, no longer of use to the fed-

eral government and declared surplus, includes such diverse items as machine tools suitable for vocational training, laboratory equipment useful in teaching science and mathematics, furniture, paint and sometimes land and buildings.

Miss Adkins said public or private school authorities interested in obtaining surplus property should contact their state surplus property agencies to establish eligibility and need. The property is allotted to the states and stored.

All types of property are not always available, of course, she added. However the state surplus property agency, if alerted by the schools, is always glad "to keep an eye out" for materials.

School Lunch Participation Expected Up Again This Year

WASHINGTON, D.C. — The U.S. Department of Agriculture has announced that it expects the number of children participating in the school lunch program to surpass the 13 million mark during the current school year. During the 1959-60 school year 12,800,000 children participated.

Warns Against Making Elementary School 'Imitation'

WASHINGTON, D.C. — The purposes of the elementary school may be overlooked if pressures for making it an imitation of a high school should grow, warns the Educational Policies Commission in its recently released pamphlet, "Contemporary Issues in Elementary Education."

For example, "a general policy of accelerating all pupils who perform above a given standard is not likely to be wise," the commission states. If acceleration "puts too much pressure on the child or destroys the contact between him and his friends, it may result in increased psychological problems rather than increased learning."

As to the foreign language teaching, the commission believes that "the school must determine which children, on the basis of their progress in other areas and their motivation for language study, stand to gain from a systematic and continued program."

"A foreign language program is not justified in the elementary school if it encroaches on pupil progress in the areas of the school's basic responsibilities," the policy group says.

School planning specialists, at first meeting in Canada, move headquarters, vote against name change, elect Tjomsland president, study local case histories illustrating how

Tie-In With Community Resources Helps Schools

LEO E. BUEHRING

TORONTO, ONT., CAN. — "No longer can we plan public schools in isolation. We must plan them in terms of community factors. An important part of the planning must be a positive tie-in with community resources and closer affiliation with other political bodies." The annual meeting of the National Council on Schoolhouse Construction, in session here October 4 through 7, served to give impetus to this theme.

For the first time in its 37 years the National Council was meeting in Canada. The Greater Toronto metropolitan area in itself provided an excellent case history for the convention discussions. Much of the conference program was devoted to reports on and inspection of school facilities created and operated under its metro government. The latter embraces a regional board of education within the framework of which 11 local school boards guard their individual community interests while sharing in common problem solving.

New Headquarters

Organizationwise, perhaps the most important action taken by the N.C.S.C. was the decision to move the headquarters of the council from Nashville, Tenn., to East Lansing, Mich., as soon as this can be accomplished.

With W. D. McClurkin, who has served 14 consecutive terms as secretary-treasurer of the organization, declining to stand for re-election, the body named as his successor Floyd C. Parker, associate professor of education at Michigan State University. Dr. McClurkin, director of surveys and field services at George Peabody College for Teachers, Nashville, was presented with a gift at the council's

annual banquet, held on October 6.

The arrangement at East Lansing is for one year, pending a restudy of the official structure of the organization and the possibility of dividing the position of secretary-treasurer into two separate offices.

Official Business

Other activities at the sessions included the following:

1. Election of Arnold C. Tjomsland as president, succeeding Lloyd L. Waite, Shreveport, La. Dr. Tjomsland is associate professor of education (finance and school building planning), Washington State University, Pullman.

2. Voted down the recommendation of a study committee for a change in name, submitted after polling the membership on several dozen substitute names.

3. Decided against organic affiliation with regional associations of school planners, but encouraged council members to be active in the five groups at the local and regional level.

4. Divided members into numerous study groups in anticipation of revising its "Guide" for 1963 publication.

5. Heard announcement that basic agreement had been reached by the task committee on school lighting standards, consisting of representatives of the American Institute of Architects, the Illuminating Engineering Society, and the council. The study, under way for nine years, is expected to produce shortly a document which it is hoped will be adopted as an official pronouncement by the American Standards Association.

6. Heard various speakers explain the Canadian school system, comprising

autonomous departments of education of the 10 provinces, without benefit of any federal department of education.

7. Inspected schools in Toronto, Scarborough, North York, Etobicoke.

8. Confirmed the previous decision to meet next year in Atlanta, Ga.

Era of Specialists

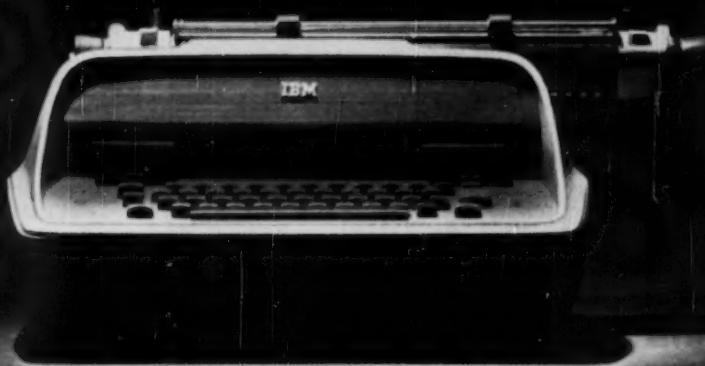
President Lloyd L. Waite explained to a representative of this magazine that the school planning specialist is a natural outgrowth of an era of specialization. The position is a relatively new one, antedating by only a few years the organization of N.C.S.C. in 1922. The first formal course in this field was initiated at Ohio State University by T. C. Holy, 1937 council president, yet today some universities offer courses leading to a doctor's degree in schoolhouse planning. Those men in the field today have entered it through various channels, but in one way or another all, to be effective, must have acquired an understanding of what goes on in the classroom and developed a value pattern which will influence their behavior, in addition to developing skills in the physical aspects of planning.

The qualified planning specialist, President Waite said, is an intermediary between the superintendent and his teaching staff and the architect. He is an interpreter of staff needs, bridges the gap between the school and the builder.

Superintendent Builder

The role of the superintendent in the school planning process was delineated for *The NATION'S SCHOOLS* by Arnold C. Tjomsland, newly

(Continued on Page 136)



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School Planning Specialists Meet in Canada

(Continued From Page 134)
elected N.C.S.C. president, in this manner:

"The school administrator is the communications officer of the school district. For this reason he needs to familiarize himself with the broad implications of school building planning — know why certain things are being done as they are to back up the educational program. He needs to develop a speaking acquaintance with building problems. The knowledge he needs is best acquired by the

superintendent, Dr. Tjomsland believes, by working closely with his school building planning specialist.

As to the manner in which the superintendent of schools can benefit most from the services of the school planning specialist in his cabinet, Dr. Tjomsland, who until recently was director of school plant planning, Washington State Board of Education, observed:

"Superlative learning is an active process, and school buildings must be designed to serve that process.

For this reason educational specifications should be stated in terms of specific activities. Unless members of the school staff can state their needs in a form of defined actions and group processes, the planning specialists will not be able to influence the design of the school in a manner to produce the kind of building needed."

In the building area the administrator functions most effectively, President Tjomsland believes, when he organizes his staff member so they can define clearly the kind of activities they carry out in their daily processes of instruction. Only then will they be able, he believes, to evaluate their present facilities with reference to their goals. Staff members must be able to put their educational goals into verbal pictures.

Chief Planners

Newly elected officers of the council, in addition to President Tjomsland and Secretary-Treasurer Parker, are: James L. Taylor, specialist for planning school buildings, U.S. Office of Education, vice president, and A. B. Grimes, Iowa State Department of Public Instruction, Des Moines, who succeeds Dr. Taylor as an executive committee member.

Continuing executive committee members are:

James L. Reid, supervisor of school plant, Maryland State Department of Education, Baltimore; Merle A. Stoneman, specialist in school plant administration, U.S. Office of Education, and until June of this year professor of school administration at the University of Nebraska, Lincoln. Immediate Past President Waite automatically became an *ex officio* member.

After taking in 16 new members and removing a similar number from the list, membership of the National Council remains in the vicinity of 300. Registered at the annual meeting were 130, with 41 women guests also present.

Speakers at the various sessions included: Hon. J. P. Robarts, minister of education for the Province of Ontario; Frederick G. Gardiner, chairman, Metropolitan Toronto Council; W. J. McCordic, executive secretary of the Metropolitan Toronto School Board; Archibald B. Shaw, editor of "Overview" magazine. Scheduled banquet speaker was Marcus Long, Professor of Philosophy, University of Toronto.



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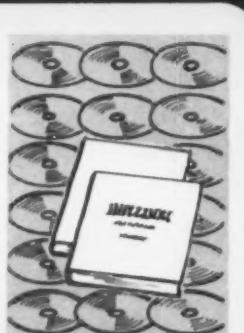
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Experimentation Viewed as Way to Quality in Education

SARANAC INN, N.Y. — Experimentation and innovation in education should be given particular attention now that "an ever more intensive concentration on quality is demanded of us," James E. Allen Jr., New York state commissioner of education told the annual meeting of the New York State Council of School Superintendents here recently.

He summarized "quantity" gains that the state has made during the last five years and said: "While I am sure that we can point to many significant improvements in the *quality* of education during recent years, we would all agree that we still have much to do to meet the standards required of us."

Dr. Allen invited the views and suggestions of the group on a program that includes the following features:

1. The establishment of a state center for educational experimentation and development that would assemble and disseminate information about current experiments, new practices, and devices in educational organization, management and teaching methods; engage in research on and evaluation of the effect of new practices on the standard of teaching and learning; exhibit and demonstrate new practices and materials being used or suggested for improving the quality of education.

2. The purchase or rental of one or more large mobile units that would tour school districts and acquaint personnel with the merits of new developments in education.

3. The appointment in each school district in the state of a coordinator of educational experimentation and development from the school staff.

4. The organization of a series of county or regional workshops.

Childhood Education Center Opens in Nation's Capital

WASHINGTON, D.C. — Financed by contributions, the new Childhood Education Center here opened recently.

Three days of dedication ceremonies designed to dramatize the importance of education in today's world marked the opening. Under the chairmanship of U.S. Commissioner of Education Lawrence G. Derthick, a panel of educators explored the role of the Association for Childhood Education International.

N.S.P.R.A. Quarter Century Old; Announces New School Service

WASHINGTON, D.C. — The National School Public Relations Association, N.E.A., is celebrating its 25th birthday this year and is now launching a new "triple threat" public relations service

for large urban and consolidated school districts.

The new "school system service," an editorial plan designed to develop a teamwork concept in school system public relations programs, will attempt to improve both school interstaff and communitywide communication.

At N.S.P.R.A.'s recent San Francisco seminar Arthur F. Corey, executive secretary of the California Teachers Association, said that emphasis on quantity in the school story is giving way to emphasis on quality. "If school public relations personnel are to interpret that story for the public, they must understand the history and philosophy of American education better than they do now."

Francis S. Chase, dean of the graduate school of education, University of Chicago, declaring that the goals of educational public relations are changing, had a similar warning: "Where once the intent was to maintain good will and win consent," he said, "it is now imperative that the P.R. man have the imagination to anticipate the demands of the public . . . a new public relations program must be put into the service of education which . . . will help the American people understand education's function."

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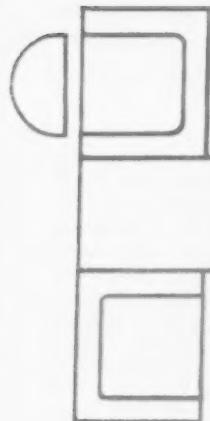
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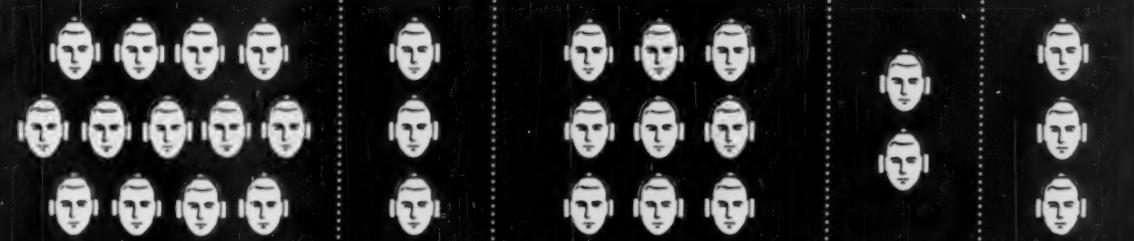
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'Position Statement' of Secondary School Principals Calls Nationwide Program in English 'Impractical'

WASHINGTON, D. C. — For the third consecutive year, the National Association of Secondary-School Principals, with headquarters here, has issued a "position statement" on an area of instruction in the comprehensive secondary school. Recently approved by the N.A.S.S.P. executive committee, the new document deals with English language arts. It is a corollary to the 1958 official pronouncement on science and mathematics and the 1959 statement on the functional teaching of modern languages.

Among the thoughts expressed in the latest statement are the following:

Because of the variation in students, teachers and schools, a single nationwide program in the English language arts is impractical. All teachers share with English teachers the responsibility for maintaining high standards in English usage.

Instruction in all parts of the English language arts should be related; composition and grammar should not be isolated in one semester, and literature in

another. The development of written curriculum guides, describing a continuous program from kindergarten through the freshman year at college, is essential.

The first of the two positive functions of the English language arts teacher is to teach students to express their thoughts (information, ideas, emotions). The statement recommends: Practice in writing and guided correction are necessary. Thus the teaching load should permit the assigning and grading of an adequate number of themes and other papers. Students should try to write on topics that are significant to them, and write for a certain person or group.

Every assigned composition that a student plans and writes deserves the teacher's careful evaluation. Correction of compositions must go beyond a hunting for commas and a searching for misspellings. Not all written work merits the same kind of careful evaluation, but uncorrected themes cannot be defended. When teaching loads cannot be adjusted, trained reading personnel should be employed to assist teachers. A student should rework his composition to improve upon his initial effort.

The second positive function of the English language arts teacher is to improve the student's ability to receive ideas. Concerning this goal, the document states:

Effective listening and viewing may involve as much mental activity as reading, speaking and writing. Instruction in the use of television, radio and motion pictures should include recognition of the impact and influence of these mass media. Literature has its greatest impact when it is relevant to the major interests and concerns of early, middle and late adolescence. Both individual and group experiences in literature must be provided at each grade level.

A major purpose in teaching literature is to instill in students a lifetime interest in books and the habit of reading widely. The literature programs for classes selected according to ability should differ qualitatively, not merely quantitatively. Advanced reading skills should be taught as an integral part of the literature program.

Students must learn to define and keep in mind their reading purposes (pleasure, study, skimming), to read efficiently, and to adjust their reading rate to their purposes and the content. Elective courses in English, in addition to the regular English classes, are recommended to develop reading skills according to the students' abilities and purposes. Remedial instruction should be provided for students reading below their potential. Individual and small group instruction in reading should be given in a clinical situation.

(Continued on Page 142)



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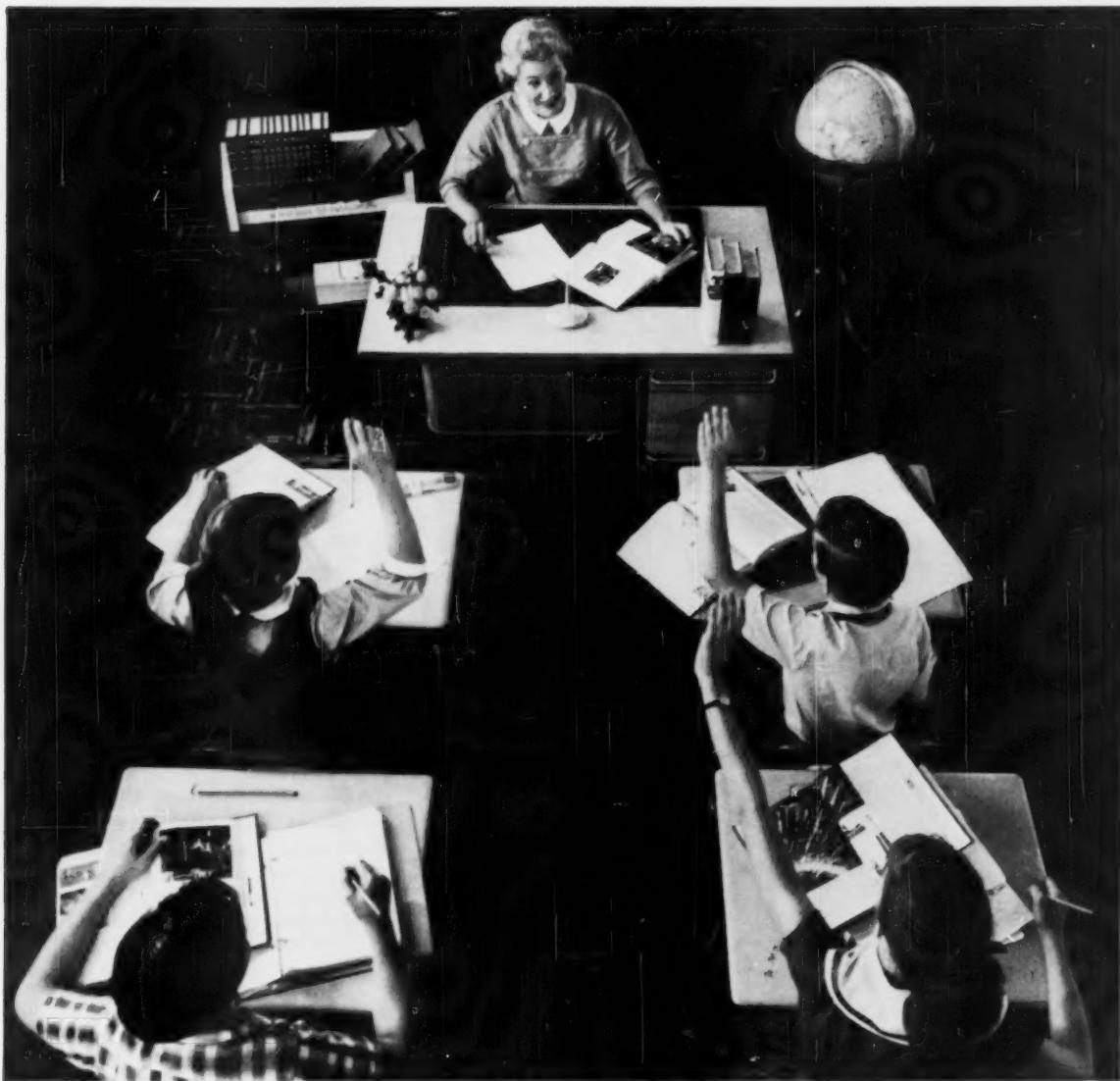
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Principals' Statement

(Continued From Page 140)

Preservice education of English language arts teachers should extend over a minimum of five years of college, the position statement suggests. For most teacher training students, the college program should include: general education, 40 per cent; academic teaching, major and minor, 40 per cent, and professional education, 20 per cent. During the period of his professional training, the teacher candidate should be kept in touch with secondary-school students and teachers so he can make practical

application as professional knowledge is acquired.

The administration should assume the responsibility for teacher orientation and for continued inservice training of the English teacher. Teachers should be encouraged to participate in the activities of professional organizations at all levels, to attend workshops and institutes, and to observe curriculum planning and experimentation in other schools.

Administrators also are to inquire of the English teachers as to what kind of clerical and instructional assistance should be employed to improve student learning and how the organization of

teaching teams would help produce optimum utilization of the specialized skills of each teacher. They should ascertain what programmed instruction devices and other scientific advances in technology might be used to add to the quality of learning and what experiments should be undertaken to improve English language arts teaching.

The original set of recommendations on English language arts was drawn up by an ad hoc committee of the N.A.S.S.P. in a conference in Washington on Dec. 13 and 14, 1959. This was revised on the basis of many recommendations made at buzz groups comprising most of the delegates to the N.A.S.S.P. annual convention held in Portland, Ore., last February.

Chairman of the ad hoc committee, which also made subsequent recommendations for final editing of the paper, was Delmas F. Miller, principal, University High School, West Virginia University, Morgantown, W. Va., and chairman of the N.A.S.S.P. committee on curriculum planning and development. On the 17 member committee, aside from those affiliated with the principals' organization, were: the executive secretary of the National Council of Teachers of English; the executive director of the Commission on English of the College Entrance Examination Board; the director of the National Commission on the English Curriculum, N.C.E.; the editor of the *English Journal*, published by Florida State University, and a number of other professors of English and education.

New Development Center Seeks To Expand Reading Skills

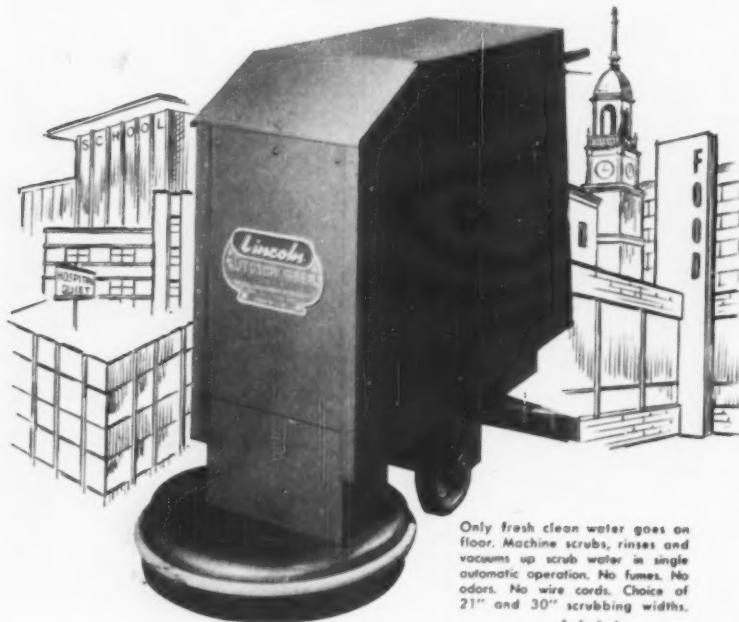
TUCSON, ARIZ. — To increase reading proficiency among Arizona public school students is the goal of a reading development center being established by the University of Arizona College of Education.

Hollis A. Moore Jr., dean of the college, said the purpose of the new program is to prepare reading specialists for service in public schools, to serve as a laboratory for experiments in improving reading skills, and to aid in improving the competence of teachers "in the important work of guiding students at all levels, especially those in high school and junior high school, toward expanded reading ability."

Directing the activities of the reading development center will be Ruth M. Strang, who will be professor of education and director of the center, and Amelia Melnik, who will serve as assistant professor of education and assistant director. The former has just ended 40 years of service as professor of education at Teachers College, Columbia University.

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New Ford Grants Will Aid Rural Education Projects

NEW YORK CITY. — Support to "improve further the education offered by the nation's small, rural schools, which are still attended by one out of every five American students," was announced recently by the Ford Foundation.

Grants totaling \$282,945 were made for three projects: the Catskill Area Project in Small School Design, \$135,000, including 27 schools in Delaware, Otsego and Chenango counties, New York (see *The NATION'S SCHOOLS*, March, April 1959); the Rocky Mountain Area Project for Small High

Schools, \$75,145, including 23 secondary schools throughout Colorado, and the Educational Resources Project, \$72,800, covering some 150 schools in Vermont and Maine and based at Goddard College, Plainfield, Vt.

With these grants, the three projects have received a total of \$827,833 from the Ford Foundation and the Fund for the Advancement of Education during the last four years.

The Catskill Area Project, begun in 1956, has introduced multiple classes in its participating small schools where one teacher teaches more than one subject in the same room at the same time. Schools also share specialist teachers in

languages, industrial arts, agriculture and other subjects. Since the cost of these "circuit teachers" is divided among the schools concerned, they are able to obtain instructional services they could not otherwise afford.

Other features of the project include employment of teacher aides — housewives and other nonprofessional persons from the community who perform clerical and routine instructional tasks under the teacher's direction; widespread use of tape recorders, films and slides; schedules that permit variation in the length and frequency of classes; supervised correspondence study, and advanced work for able students.

Like the Catskill Project, the Rocky Mountain Area Project for Small High Schools is introducing multiple classes and making extensive use of audio-visual devices as aids to instruction. A number of schools are using filmed courses in physics and chemistry taught by college teachers who are regarded as outstanding.

A major emphasis in the Rocky Mountain Project is the improvement of instruction through a better understanding of the dynamics of teaching small groups of students. Selected teachers in the project will study small-group teaching methods used in industry for their applicability to classroom practice. The project, which began in 1957, is being conducted under the auspices of the Colorado Department of Education.

In the Educational Resources Project, begun in 1956, seven colleges in northern New England are helping rural schools improve their teaching programs. Students from these colleges are serving as teacher assistants in near-by schools. They relieve teachers of part of their routine tasks and contribute to the instructional program by teaching a variety of subjects — music, science and art, for example — for which full-time teachers are lacking. Participating colleges also are making their laboratory and library facilities available to schools in their areas.



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1038 Europe after the Treaties of 1919-1924	522 Transportation, Principal Railroads since 1880.
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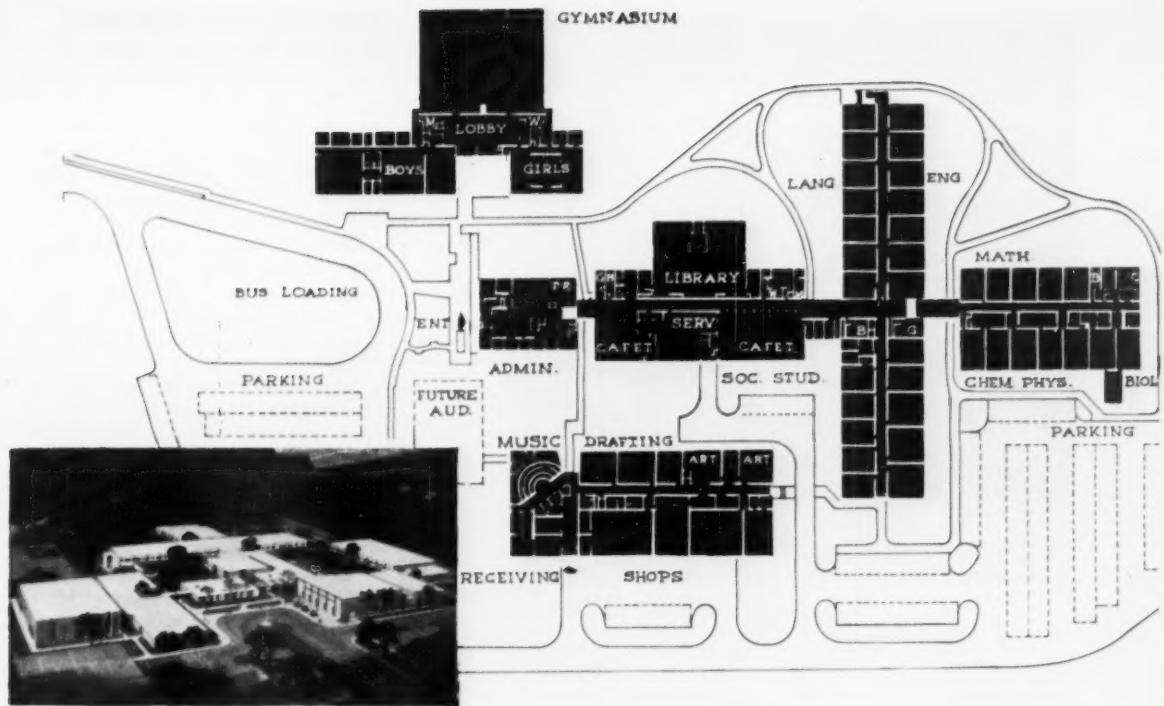
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This unusual new high school in Darien, Conn. has a present enrollment of 810 pupils, yet can easily be expanded to accommodate the 1200 to 1300 student population expected within five years. Architects Ketchum & Sharp, consulting engineers Cosentini Associates, and a hard working school building committee planned wisely for both present and future while keeping square foot costs below those of Darien schools built in 1948 and 1951.

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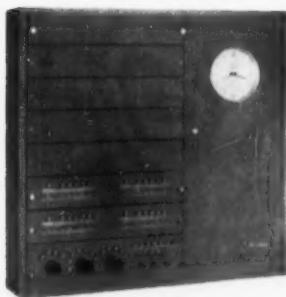
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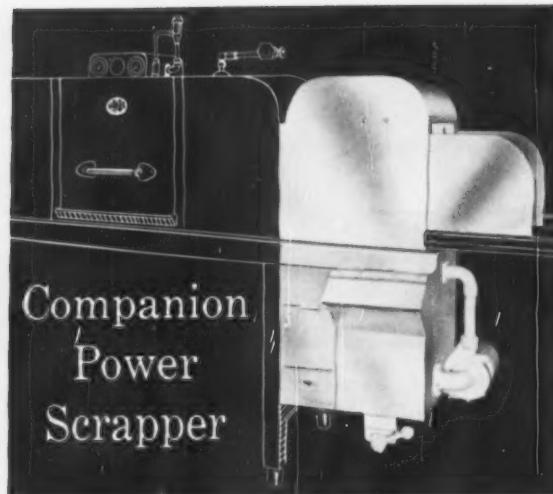
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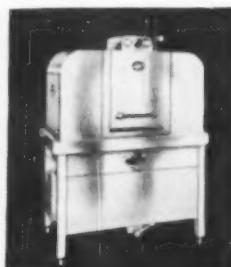
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Administrators Issue Charter for Education in the Sixties

NEW YORK. — Superintendents agree that there is a direct relation between the amounts of money spent for education and the quality of education attained, but they would like better guidance on the priorities given such spending for education.

They also want more attention given to educational research, and they note that "industry spends three times more on research than is spent for all functions of public and private education in this country."

These are some conclusions of a group of superintendents from 36 communities in 33 states and Canada. They are included in "A Charter for American Education in the 1960's," prepared by the group at the close of a recent conference at Teachers College, Columbia University, New York City.

The superintendents would like to know more about spending priorities in education. For example, is it better to put more money into the class-size problem and inservice education or into the selection of teachers, materials, equipment and staff services? They also want more adequate systems of cost accounting "to enable us to determine the cost of specific aspects of the educational program."

The time between the discovery of new educational practices and their universal adoption by schools must be shortened, the charter notes. However, "changes in education will come only through 'evolution,' based on the findings of research, competent observation, and good thinking," say the superintendents.

Denying "well qualified teachers an opportunity to experiment would strike a stifling blow to the advancement of education," the charter states, adding that "experimentation in the classroom — 'action research' — is the most promising new idea for improving education."

Making the general point that the objectives of public education must be worked out cooperatively by all levels of society, the superintendents declare that "there is great strength in diversity of opinion" on educational matters.

"We need the voices of intelligent citizen dissent," they explain.

The superintendents regard employment an important part of a student's educational growth. But they say that compulsory attendance and child labor laws do not always serve the best interests of students with limited academic ability. They hope that the laws will be changed to permit such students to leave school for selected jobs and to complete their high school education over a longer period out of school.

(Continued on facing page)

School organization and administration must be made more flexible to allow, for example, greater variety in instructional materials, experimentation with ungraded elementary schools, restudy of the Carnegie unit, smaller classes, and continuing study of the work of the junior high school.

Recommendations for school staffing include these:

More imaginative policies are needed for obtaining and holding good teachers.

Education can profit from part-time or occasional use of persons outside the profession who are qualified to contribute to a child's education. "Unfortunately, many states now have certification laws and regulations that inhibit the use of such persons."

On school financing, the charter said that states and local communities, which collect only 25 per cent of the nation's tax revenue, "cannot continue to bear the full burden of the cost of public education."

The federal government, collecting 75 per cent of tax revenue and the chief custodian and distributor of public funds, should share more of the cost of education, according to the charter.

Superintendent Conducts Study of 'Tax Revolt' on Schools

ELMONT, N.Y. — Voter resistance to school spending is greatest in heavily populated residential areas, according to a study by Supt. Ray L. Lindblom here.

Mr. Lindblom made the study following indications of a taxpayers' revolt in 1959, when 15 proposed school district budgets were defeated in Nassau and Suffolk counties, New York. After surveying 18 Nassau school districts, Mr. Lindblom concluded that "those districts having the greatest proportion of residential property, in which the home owner bears the greatest direct burden of taxation, exhibit the greatest amount of voter resistance."

This indicates, Mr. Lindblom said, that "an increasingly large segment of the public is expressing, through the one surviving method of doing so directly, an attitude of opposition to the increasingly burdensome and unjust demands of the property tax."

Malaya Will Have Free Primary Education

KUALA LUMPUR, MALAYA. — A new education policy adopted by the government here provides free primary education and raises the compulsory attendance age to 15. Under the new policy, all subjects ultimately will be taught in the national language of Malay.

Schools may choose to remain independent of the new policy, but will not receive government aid if they do so.



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washer
work-
horse

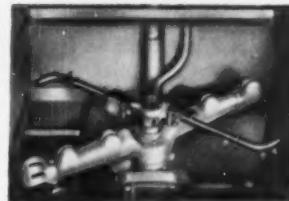
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Conducts Seminar Class for Bright High School Students

LOS ALAMOS, N.M. — A seminar class for high school juniors and seniors, who are above average in intelligence, is being held here for the second year.

Under the guidance of a regular faculty member, the schedule gives the students an opportunity to attend assemblies sponsored by specialists, conduct individual research, meet as a group for discussions, organize materials into good written form, and study independently on timely subjects. A full credit is granted on completion.

Areas for study are chosen by the students on the basis of interest and personal desire.

Supt. C. W. Richard concludes that "such a program has considerable merit in that it does give the superior students a chance to demonstrate their initiative."

Traces School Vandalism to No Leadership, Belonging

SYRACUSE, N.Y. — A two-year study of vandalism here indicates that when school administration is "inadequate" and leadership is found lacking, property damage results. The study, conducted by Nathan Goldman of Syracuse University for the U.S. Office of Education, also notes that vandalism occurs when students feel disassociated from their school staff and their parents.

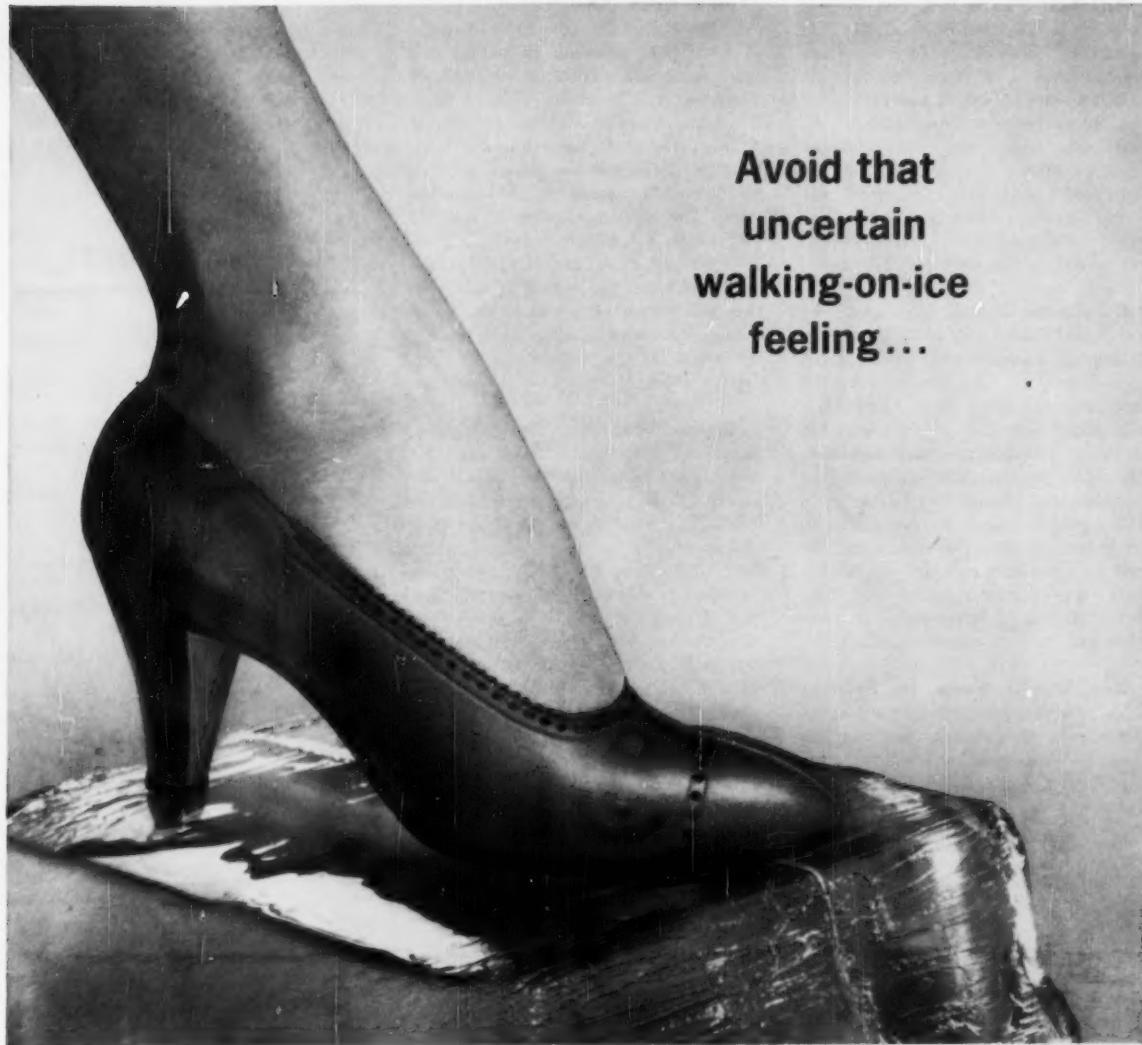
Vandalism also occurs when there is: rapid or extensive change in the school program, population and staff; dissatisfaction of student and school staff with school administration; community instability and neighborhood deterioration.

In explaining his study (based on 1170 student questionnaires, 367 teacher interviews, and histories of 16 junior and senior high schools in Syracuse), Dr. Goldman said that "when members of the school group have a sense of belonging to the school, and when they feel that the school belongs to them, morale tends to be high and damage low. But where there is little sense of belonging, we can expect to find a greater amount of property damage."

He urged that educators concerned with reducing damage keep the curriculum abreast of student needs.

The Public — Give It What It Wants?

From a letter to the *New York Times*: "The school year is still proportioned to a rural economy, when all members of farm families were needed in the fields during the summer. Today the expanding school curriculum requires extension of the school year. The horse-and-buggy leisurely approach to a diploma must be accelerated to the needs of the day. The school year should commence August 15 and end June 30."



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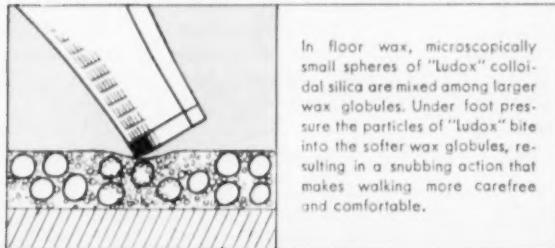
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Another Three R's. Following a report by a P.T.A. in Portland, Me., on the moral behavior of Deering High School students, a new student code book has been published and distributed that emphasizes the importance of responsibility, respect and regard for the rights of others. A student committee was formed to present the "other" side of the situation, which the P.T.A. had called "shocking." Both groups worked and agreed on the principles set forth.

Guidance Saves. In a recent issue of the *Saturday Evening Post*, Earl H. Hanson, superintendent of schools at Rock Island, Ill., compares school guidance with the atom today. Everybody talks about them [atoms], he notes, but not many people understand how they work. Dr. Hanson defines guidance as "a systematic attempt to (1) size up a child's potential, and (2) steer him in the proper direction to achieve it." He calls for a program in which the teacher plays "a greater and greater role, supported, of course, by professional counselors and the best techniques available."

Not Worth Year in Prison. A Junior high school principal in Juneau, Alaska, was sentenced to five years in prison for stealing \$1200 worth of equipment from the school. Four years of his sentence were suspended.

Now Hear This. Chicago's public schools are planning installation of sound sensitive equipment in 12 of the big city's south side schools for detection of vandalism and break-ins. General Supt. Benjamin Willis says a trial installation of the electronic "eavesdropping" devices in 10 schools has proved successful in cutting incidents of vandalism there. The listening devices in each of the schools will be connected to a nearby police station. Any sound in the buildings when the system is in operation will trigger an alarm in the police station — without warning those causing the noise. Oh yes, the devices also permit the police to listen in on the schools.

There Goes That Song Again. New York City school officials have rejected what they term "incompetent accusations" by City Controller Lawrence (Never-Say-Die) Gerosa that the board of education is requesting more money for school construction than it can spend. Mr. Gerosa, in his latest accusation, says that during the first six months of this year the board has committed less than \$31 million of the nearly \$70 million allocated for 1960. (The board had originally asked for \$104 million in capital funds this year.) John J. Theobald, superintendent of New York City schools, declares that "anyone who has ever had anything to do with a capital

budget — including the controller — knows that you never spend on a simple ratio basis." In defending the board's record, Dr. Theobald says he will let facts speak for themselves instead of wasting time answering the accusations of "incompetent people of evil intent."

Coming Events

NOVEMBER

- 6-7. Association of Urban Universities, Cincinnati.
- 6-12. American Education Week.
- 15-19. Council of Chief State School Officers, Santa Fe, N.M.
- 23-26. National Council for the Social Studies, Boston.

FEBRUARY

- 11-15. National Association of Secondary-School Principals, Detroit.
- 22-25. American Educational Research Association, Chicago.
- 22-25. American Association of Colleges for Teacher Education, Chicago.
- 23-25. United Business Education Association, Chicago.
- 25-28. American Association of School Administrators, regional meeting, San Francisco.

MARCH

- 5-8. Association for Higher Education, Chicago.
- 11-14. American Association of School Administrators, regional meeting, St. Louis.
- 12-16. Association for Supervision and Curriculum Development, N.E.A., Chicago.
- 18-22. Department of Elementary School Principals, N.E.A., Atlantic City.
- 25-28. American Association of School Administrators, regional meeting, Philadelphia.
- 25-29. National Science Teachers Association, Chicago.

APRIL

- 5-8. National Council of Teachers of Mathematics, Chicago.
- 11-15. National Art Education Association, Miami Beach.
- 16-22. National Library Week.
- 24-28. Department of Audio-Visual Instruction, N.E.A., Miami Beach.

JUNE

- 18-22. National Association of Student Councils, Oklahoma City.
- 25-30. National Education Association, Atlantic City.



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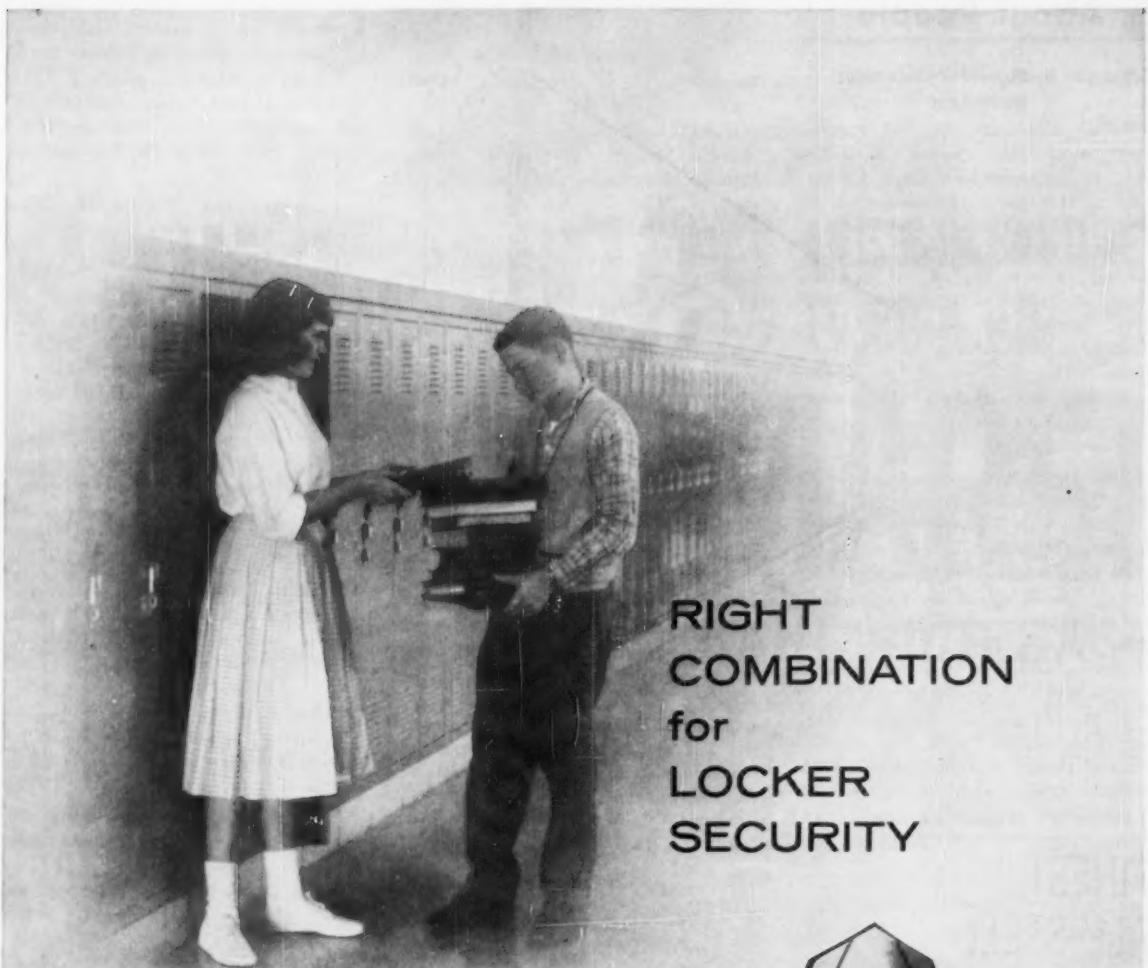
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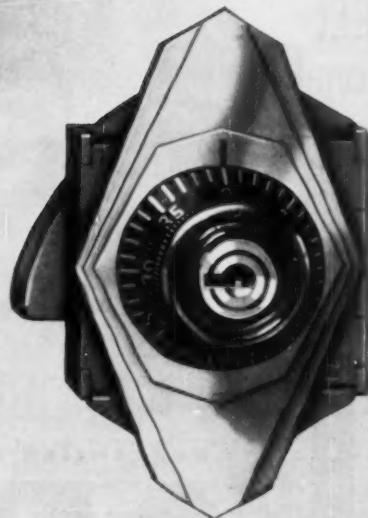
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About People

Changes in Superintendencies

NORTHEAST

Robert A. Gibson, principal, Richard Montgomery High School, Rockville, Md., to superintendent, Cecil County, Elkton, Md. He is president-elect of Maryland State Teachers Association.

Andrew J. Manges, Regional High School District No. 8, Willimantic, Conn., to Brookfield, Bridgewater, Roxbury, Sherman, Washington and New Fairfield school districts, New Milford, Conn.

Franklyn A. Graff, acting superintendent, Westport, Conn., to assistant superintendent there.

John Houston, assistant superintendent, Quincy, Mass., to superintendent, Medford, Mass., succeeding **Bertrand Hooper**, who retired.

F. Robert Mercer, administrative assistant, special school district, Newark, Del., to superintendent, special school district, Lewes, Del., succeeding **Leon H. Farrin**, who goes to Boyertown Area Joint School District, Boyertown, Pa.

W. Henry Cone, assistant superintendent, Longmeadow, Mass., to superintendent there, succeeding **Howard C. Herrschaft**, who retired.

Robert C. Hoops, assistant superin-

tendent, New Milford, N.J., to superintendent there.

Carl J. Pecoraro, principal, Washington School No. 2, Garfield, N.J., to superintendent, Garfield.

Harold L. Ritchie, principal, North Haledon Memorial Elementary School, Paterson, N.J., to superintendent, West Paterson, N.J.

Byron Evans, assistant superintendent, Highland Park, Mich., to superintendent, Saratoga Springs, N.Y., succeeding **Claude Van Wie**, who resigned.

Gordon A. Wheaton, supervising principal, Monroe-Woodbury Central School District, Central Valley, N.Y., to superintendent, the enlarged city school district, Corning, N.Y.

Roscoe L. Williams, high school principal, Red Hook, N.Y., to superintendent, Dutchess County Supervisory School District, Millerton, N.Y., succeeding **Milo F. Winchester**, who retired.

Peter J. Dugan, acting superintendent, Liverpool, N.Y., to superintendent there.

Howard E. Imhof, Oyster Bay, N.Y., to the new Central School District comprised of Oyster Bay and East Norwich, N.Y.

James E. Moran, high school principal, Wilby, Conn., to assistant superintendent, Waterbury, Conn. **Edward A. Ricciuti**, director of guidance and pupil services, Waterbury, to director of spe-

cial services there. **Jacob D. Rieger**, supervisor of secondary education, Waterbury, to director of business there.

Francis H. Oldham, principal, Clifford J. Scott High School, East Orange, N.J., to superintendent, Watchung Hills Regional High School District, Millington, N.J.



Frederick J. Gillis, assistant superintendent since 1935, Boston, to superintendent there. While serving as assistant superintendent he organized and developed classes for the trainable retarded. He also organized the department of school lunches and developed the safety education program. Previously Dr. Gillis was in charge of practice teaching and director of teacher training at Boston College for 10 years.

Joseph V. Summers, principal, Bennett Street Elementary School, Freehold, N.J., to superintendent, Borough School District, Freehold, N.J.

Robert C. Campbell, Franklin Township School District, Franklinville, N.J., to Washington Township School District, Sewell, N.J.

David J. Brittain, administrative assistant, Rutherford, N.J., to superintendent there.

David A. Noonan, Carlstadt, N.J., to Hillsborough School District, Belle Mead, N.J.

Arthur Watt, high school principal, Easthampton, Mass., to superintendent there.

Philip G. Rhoads, businessman, to assistant superintendent in charge of business administration, Wilmington, Del., succeeding the late **John J. Murray Jr.**

MIDWEST

Roscoe C. Miner, Godwin Heights Public School District, Grand Rapids, Mich., to Niles, Mich. He succeeds **Paul H. Appel**, who becomes an assistant in the continuing education department, Michigan State University, East Lansing.

Paul E. Seitsinger, Lisbon, Iowa, to Hooperston, Ill.

Robert K. Moore, assistant superintendent, Metropolitan School District of Washington Township, Indianapolis, to superintendent, Frankfort, Ind., succeeding **Samuel M. Woodruff**, who resigned.

Roy E. Smith, Anna, Ill., to Rockridge Community Unit School District No. 300, Reynolds, Ill., succeeding **Ralph K. Fox**, who resigned.

Walter L. Karrick, Ashland, Ill., to Havana, Ill. (Cont. on Page 154)

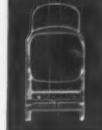
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Maret bags are ideal for rolls, cake slices, cookies, doughnuts—any fast-service food that demands freshness. Fresher food means satisfied customers and repeat sales. Maret's superior protection costs no more.



YOU'LL LIKE THE CONVENIENCE OF MARET—Pressure-waxed Maret Sandwich Bags open easily for quick wrapping. Maret forms a neat, compact package. Tests show extremely low moisture loss. Maret comes in handy 1000-bag carton that turns quickly into a self-dispenser for faster, easier use.

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Please have my Man from Marathon call.

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City _____ Zone _____ State _____

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(Continued From Page 152)

Clifford Owen, dean of students, Community High School, West Chicago, Ill., to superintendent, West Chicago, succeeding **Kenneth Stroker**, who resigned.

George E. Proeck, junior high school principal, River Forest, Ill., to elementary school superintendent, Prospect Heights, Ill.

William C. French, high school principal, Syosset, N.Y., to superintendent, Township High School and Junior College, Joliet, Ill., succeeding **Hugh S. Bonar**, who retired after 13 years there.

Roger Bardwell, former director of elementary education, West Bend, Wis., to superintendent, Elk Grove School District No. 59, Arlington Heights, Ill.

Roy E. Clarke, assistant superintendent, Ralls County Reorganized School District No. 2, Center, Mo., to superintendent there, succeeding **Gale T. Bartow**, who resigned.

George Ruwitch, Lincoln Consolidated School District, Ypsilanti, Mich., to East Grand Rapids School District, Grand Rapids, Mich., succeeding **Roy Feathers-ton**, who resigned.

Walter G. Hampton, assistant superintendent, Lake Orion, Mich., to superintendent, Livingston County, Howell, Mich.

Richard Van Atta, Northmont Local

School District, Englewood, Ohio, to Exempted Village School District, Clyde, Ohio.

Richard P. Gousha, former research assistant, school of education, Indiana University, Bloomington, to superintendent, Cuyahoga Falls, Ohio.

Gordon G. Humbert, Lima, Ohio, to Canton, Ohio. He has served as principal of Blume High School, Wapakoneta, Ohio; Coshocton High School, and South High School, Lima. Mr. Humbert also has been an instructor in the colleges of education at Ohio Wesleyan University, Delaware, and Ohio State University, Columbus.

James H. Cherry, assistant superintendent, Township High School and Junior College, Joliet, Ill., to superintendent, Urbana, Ill.

Ralph E. Elsea, Bridgewater-Fontanelle School District, Fontanelle, Iowa, to Nashwauk-Keweenaw Independent School District No. 319, Nashwauk, Minn.

H. G. Hegdal, Lakeville, Minn., to Eveleth, Minn.

John M. Stabler, principal, Mayo Junior High School, Paris, Ill., to superintendent, Paris, succeeding **Gerald R. Brown**, who resigned.

F. Don Maclay, superintendent and president of the junior college, Fairbury, Neb., to superintendent, Norfolk, Neb.

He succeeds **Allen P. Burkhardt**, who becomes professor of education, Nebraska State Teachers College, Wayne.

SOUTHEAST

W. Roy Bondurant, principal, Bridgeport School, Frankfort, Ky., to superintendent, Franklin County, Frankfort, Ky., succeeding **Charles W. Hart Sr.**, who becomes assistant superintendent for business affairs, Louisville, Ky. Mr. Hart succeeds **William D. Chilton**, who becomes assistant superintendent for general administration there.



Samuel V. Noe

Samuel V. Noe, assistant superintendent for general administration, Louisville, Ky., to superintendent there. He served as administrative assistant to the city's superintendent from 1950 to 1957. He came to Louisville in 1928, as principal of John C. Strother School. Mr. Noe has served as vice president of the Kentucky Education Association. During World War II he received the Bronze Star for outstanding work as regional director of education in the Naples, Italy, area. **E. W. Belcher** becomes assistant superintendent in charge of instruction in addition to director of instructional services, Louisville.

Raymond S. Dispanet, Hardy County, Moorefield, W. Va., to Morgan County, Berkeley Springs, W. Va.

W. P. Griffin, principal, Lee H. Edwards High School, Asheville, N.C., to superintendent, Asheville.

William P. Eidson, principal, Hager Elementary School, Ashland, Ky., to superintendent, Boyd County, Catlettsburg, Ky.

Reuben C. Hinsdale, principal, Simon Kenton High School, Kenton, Ky., to superintendent, Kenton County, Independence, Ky., replacing **James B. Graham**, who has withdrawn his acceptance of the post.

John Owens, high school principal, Independent School District, Greenville, Ky., to superintendent there. He succeeds **Robert P. Forsythe**, who becomes director, division of pupil transportation, Kentucky State Department of Education, Lexington.

Lloyd Patterson, high school principal, Richmond, Ky., to superintendent there, succeeding **Leonard C. Taylor**, who goes to Danville, Ky.

Thomas E. Smith, superintendent, Bay County, Panama City, Fla., to business manager and assistant to the superintendent, Brevard County, Titusville, Fla.

J. R. Callison, Gainesville, Ga., to Buford, Ga. (Cont. on Page 156)

"Two on the aisle . . ."

... or a single in the balcony, Geerpres "Convertible mopping outfits can be tailored to any need. Rubber bumper equipped buckets can be used individually or hooked together to form twin outfits for two-solution mopping, or cleaning large areas.

"Convertibles" can be mixed or matched in four models from 4 to 11-gallons. Ask your Geerpres jobber or write today for free bulletin.



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New, low-priced mobile folding table

Keep costs down with this economy-priced, mobile folding table—the new HOWMATIC "TN." Available in 4 sizes.

Solving your cafeteria problems on a limited budget isn't difficult. The trick is to do it without compromising on essentials.

When it comes to budgeting for your cafeteria tables, skimping's unnecessary. Not with the new economy-priced HOWMATIC "TN" available.

For all that, the new HOWMATIC "TN" offers you features available in no other table in its price range! To cite a few:

1. The HOWMATIC "TN" opens or folds in one, easy motion. Either action takes just 3 seconds. Here's why:

Folded, the HOWMATIC "TN" stands on castered legs. These free-wheeling casters roll smoothly, easily, making the unit a snap to fold or unfold.

When the HOWMATIC "TN" is folded, rubber-capped center legs remain free of the ground. The moment the table is fully open, however, these center supports come down automatically, grip the floor firmly, anchoring the unit.

2. Strength where it counts. The HOWMATIC "TN" is built around the same type of durable, all-steel chassis for which HOWE tables are noted. Steel rivets join this chassis to the table's 14-gauge tube steel legs permanently.

Chassis and legs are finished with a bright, rustproof, Cadmium plating that won't chip, never requires repainting.

3. Durable top. The HOWMATIC "TN" comes with a *solid*, built-up top consisting of a plywood sheet covered with a layer of plastic laminate. (Your choice of patterns.) A hardboard backing adds extra strength. The entire top is trimmed with a plastic flush edge.

4. Compact and maneuverable. The HOWMATIC "TN" handles easily. 3", hard rubber, swivel casters insure maximum mobility—important when moving a table through crowded corridors.

Rustproof bearings assure long life, quiet, smooth, trouble-free service.

5. Safety features. Counterbalanced spring construction holds the unit in check, keeps the HOWMATIC "TN" from suddenly snapping open or slamming shut.

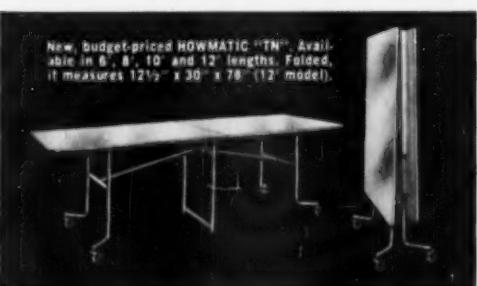
A $\frac{7}{8}$ " safety gap where the top's two halves would meet eliminates the danger of injured fingers. In addition, the HOWMATIC "TN"'s top has 2" radius safety corners.

Another safety feature is the table's low center of gravity. When active youngsters get playful or the folded unit is moved about hurriedly, the HOWMATIC "TN"'s design keeps table from tipping.

6. Saves valuable school activity time. No need to clean the HOWMATIC "TN" before folding and storing. At all times, surfaces are easy to reach and clean. In addition the unit's single-fold structure and $\frac{7}{8}$ " center seam eliminate corners where food particles otherwise might accumulate.

7. Seats pupils comfortably. The HOWMATIC "TN" seats from 8-18 pupils comfortably depending on whether 6', 8', 10' or 12' units are used.

New, budget-priced HOWMATIC "TN". Available in 6', 8', 10' and 12' lengths. Folded, it measures 12½" x 30" x 78" (12' model).



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Get data on the new, budget-priced HOWMATIC "TN" and other HOWE mobile folding units.

NS-110

Name Title

School

Address

City Zone State

(Continued From Page 154)

Charles McDaniels, principal, Druid Hills High School, Atlanta, to superintendent, Thomasville, Ga.

SOUTH CENTRAL

L. T. Cannon, principal, Gould, Ark., to superintendent there, succeeding **V. G. Anderson**, who retired.

WEST

Merrill M. Hatcher, principal, Polaris School, Fort Richardson Army Post, Anchorage, Alaska, to superintendent at the Fort Richardson post. He succeeds **William T. Zahradnick**, who goes to Palmer, Alaska, succeeding **A. W. Morgan**. Mr. Morgan goes to Elmendorf School, Anchorage, Alaska.

Dale T. Hobson, assistant superintendent, Cajon Valley Union Elementary School District, El Cajon, Calif., to assistant superintendent, El Centro, Calif., succeeding **Don E. Halverson**, who becomes superintendent there.

David Potter, Huntington, Ore., to Jefferson County, Madras, Ore.

Harold V. McAbee, assistant superintendent, Bethel School District No. 52C, Eugene, Ore., to superintendent, School District No. 1, LaGrande, Ore.

Evert A. Robinson, Glen Avon Elementary School District, Riverside, Calif., to South Whittier Elementary School District, Whittier, Calif.

Lars Barstad, assistant superintendent of education services, San Luis Obispo, Calif., to superintendent there.

Other Appointments . . .

Robert Gourley, superintendent, Leaf River, Ill., to assistant professor of education, Northern Illinois University, De Kalb.

William L. Erickson, director of instructional services, Montana State Department of Public Instruction, Helena, has been appointed deputy state superintendent there. He succeeds **Paul T. O'Hare**, who becomes assistant to the superintendent, Billings, Mont.

Alonzo G. Grace, associate dean, school of education, New York University, to dean, college of education, University of Illinois, Urbana. He succeeds the late **B. L. Dodds**.

Woodrow W. Wilkerson, Virginia state director of secondary education, Richmond, to state superintendent of public instruction there, succeeding **Davis Y. Paschall**, who becomes president of the College of William and Mary, Williamsburg, Va.

Earl R. Boggs, dean, Longwood College, Farmville, Va., has been appointed dean, college of education, West Virginia University, Morgantown, effective February 1961.

Garland Godfrey, former superintend-

ent, Durant, Okla., has been appointed president, Central State College, Edmond, Okla.

Leon J. Alger, supervising teacher of vocational agriculture and director of adult education, Williamston, Mich., to research consultant, division of vocational education, Michigan State Department of Public Instruction, Lansing.

Resignations . . .

Donald L. Kennedy, Garden Grove, Calif.

Agnes Y. Thomas, Hendry County, LaBelle, Fla.

M. W. Fondren, Wilkinson County, Woodville, Miss.

John D. Bezek, Highlands School District No. 106, LaGrange, Ill.

Retirements . . .

Harold B. Long, Gilroy, Calif.

Henry H. Hill, president, George Peabody College for Teachers, Nashville, Tenn., effective Aug. 31, 1961.

G. H. Ridings, Dunklin County, Kennett, Mo., after 18 years there.

Deaths . . .

William Lewin, 71, audio-visual education specialist. He was formerly chairman of the English department, Weequahic High School, Newark, N.J., and was past president of the department of secondary teachers of the N.E.A.

Dewey Fristoe, 61, associate professor of education, Wesleyan University, Bloomington, Ill. He was superintendent at Flossmoor, Ill., from 1943 to 1957.

William R. Woodie, 38, Lane County, Eugene, Ore.

Arthur Cutts Willard, 82, president emeritus, University of Illinois, Urbana.

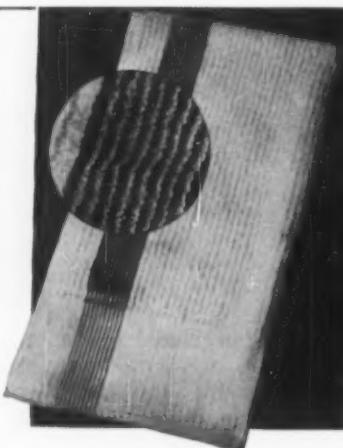
Thomas Woody, 68, professor of education, University of Pennsylvania, Philadelphia, after 41 years as a member of the faculty there.

C. D. Redding, 62, Frankfort, Ky., after 21 years there.

R. V. Kerr, 68, retired superintendent, Bossier Parish Schools, Benton, La. He was superintendent there from 1921 to 1956.

John E. Fintz, assistant superintendent for special schools, Cleveland.

P.T.A.: We Like! "May we have permission to reproduce a few copies of the Parker story ('How To Improve the Home-School Partnership. An Interview with Mrs. James C. Parker', The NATION'S SCHOOLS, July)?" asked the public relations department of the National Congress of Parents and Teachers with headquarters in Chicago. TNS was pleased to oblige. The "few" copies turned out to be 5000.



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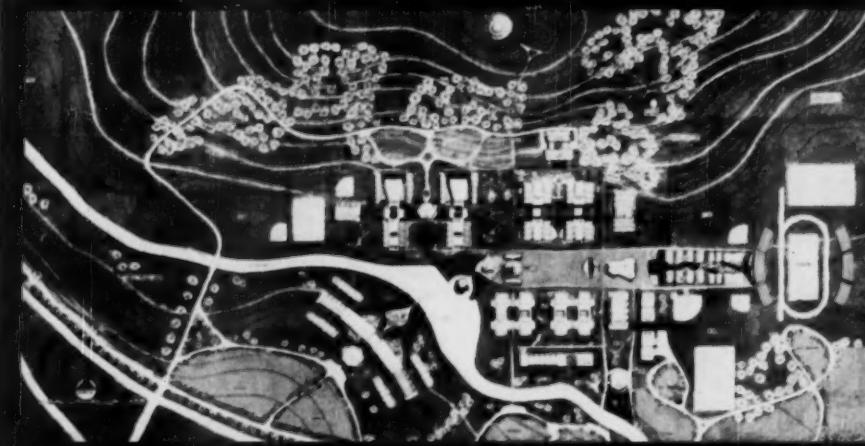
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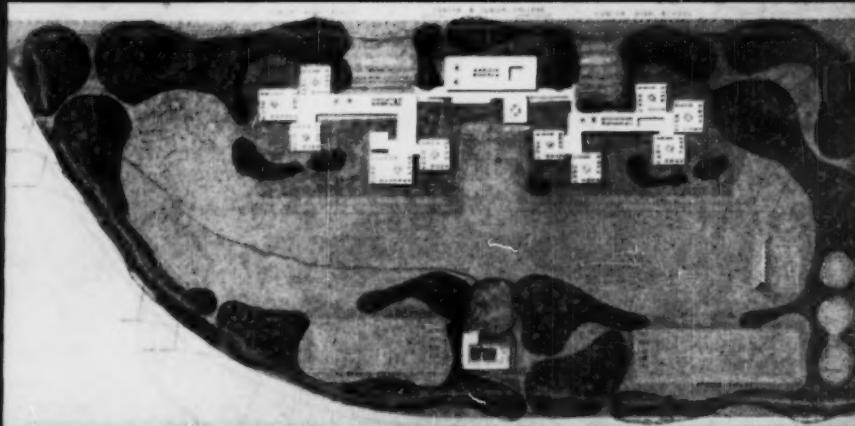


GRAND PRIZE

Edward Colbert, A.I.A.
and Alfred J. Petrilli.
— "The main feature
was the total plan,
with center of plant
revolving around the
information center.
Most impressive."

SECOND PRIZE

Edwin F. Harris, Jr.
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planning, with Junior
High School, High
School and the Col-
lege planned on one
very large space
module."



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Book Shelf

Publications of recent copyright and of interest to school administrators

FROM SCHOOL DISTRICTS

Portland Public Schools, 1958-59. 86th annual report. School District No. 1, Multnomah County, Portland, Ore. Pp. 37.

School-Community Improvement. A report of the Greenbrier County, W. Va., program. World Book. Pp. 325. \$5.

Parma Public Schools. Annual report. Parma Public Schools, 5401 W. 54th St., Parma 29, Ohio. Pp. 30.

Superintendent's Annual Report, 1959. Dallas Independent School District, Dallas. Pp. 38.

Report of Achievement and Progress, 1958-59. Rocky River Public Schools, 3111 Wooster Rd. Rocky River 16, Ohio. Pp. 30.

101 Good Ideas for Improvement of Instruction. Edited by William J. Hageny, State University Teachers College, New Paltz, N.Y. Pp. 30. \$1.

Annual Statistical Report of the Superintendent of Schools, 1958-59. Cincinnati Public Schools, Cincinnati. Pp. 48.

GOVERNMENT AND EDUCATION

Federal Support for Education. F. J.

Seidner, Public Affairs Institute, 312 Pennsylvania Ave., S.E., Washington 3, D.C. Pp. 22.

OF GENERAL INTEREST

Moral and Spiritual Values in the Public Schools. Educational Policies Commission, N.E.A. Pp. 100. \$1.

Education in America. James M. Hughes, Northwestern University. Row, Peterson and Co., 2500 Crawford Ave., Evanston, Ill. Pp. 491. \$6.

Education for Effective Thinking. William H. Burton, formerly Harvard University, and Roland B. Kimball, New Hampshire State Department of Education, and Richard L. Wing, formerly Long Beach City College. Appleton-Century-Crofts. Pp. 499.

The Task of Public Education. Lawrence Wm. Downey, University of Chicago. Midwest Administration Center. Pp. 88.

American Education. Revised ed. Emma Reinhardt, Eastern Illinois University. Harper. Pp. 441. \$5.

A Teacher Speaks. Philip Marson. David McKay Co., Inc., 119 W. 40th St., New York 18. Pp. 230. \$3.95.

The Junior College: Progress and Prospect. Leland L. Medsker, University of California. McGraw-Hill. Pp. 352. \$6.50.

Midwest Program on Airborne Television Instruction. M.P.A.T.I., Memorial Center, Purdue University, Lafayette, Ind. Pp. 28.

The Upper Quarter. A study of education beyond high school for the upper fourth of New Hampshire high school graduates. Margaret R. Cusick. New Hampshire Council for Better Schools, 922 Elm St., Manchester, N.H. Pp. 32.

How To Help Your Child Learn. Beatrice M. Gudridge. A handbook for parents of children in kindergarten through grade 6. N.E.A. Pp. 40. 50 cents.

The Concern of All. Maurice J. Thomas, University of Pittsburgh. Tri-State Area School Study Council, University of Pittsburgh, Pittsburgh 13. Pp. 51. 75 cents.

School Aides at Work. Catskill Area Project in Small School Design, 215 Home Economics Building, State University College of Education, Oneonta, N.Y. Pp. 23. 50 cents.

Education for the Economic Challenges of Tomorrow. Joint Council on Economic Education, 2 W. 46th St., New York 36. Pp. 60.

The Parent-Teacher Partnership. Ernest Osborne, Teachers College, Columbia University. Pp. 52. 60 cents.

The Case for Basic Education. Edited by James D. Koerner, Council for Basic Education. Little, Brown & Co., 34 Beacon St., Boston 6. Pp. 250. \$4.

Southern Schools: Progress and Problems. Southern Education Reporting Service, 1109 19th Ave., South, Nashville, Tenn. Pp. 171.

PUBLIC RELATIONS

How To Tell the School Story. Leslie W. Kindred, Temple University. Prentice-Hall. Pp. 485. Trade edition, \$9; text edition, \$6.75.

REFERENCE

Brewer's Dictionary of Phrase and Fable. Revised and enlarged ed. Harper. Pp. 977. \$5.95.

SCHOOLHOUSE PLANNING

Economic Planning for Better Schools. Benjamin Handler, Department of Architecture, University of Michigan, Ann Arbor. Pp. 103. \$5.

SCIENCE EDUCATION

Policies for Science Education. Edited by Frederick L. Fitzpatrick, Teachers College, Columbia. Pp. 219. \$3.95.

SPECIAL EDUCATION

Teaching the Mentally Retarded Child. Natalie Perry. Columbia University. Pp. 271. \$6.

STATISTICS

Teacher Supply and Demand in Public Schools, 1960. No. 1960-R7. Pp. 48. \$1. Research directed by Ray C. Maul, N.E.A.

TRANSPORTATION

Minimum Standards for School Buses. Revised ed. N.E.A. Pp. 55. \$1.

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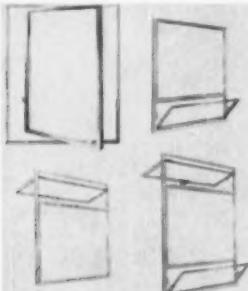
AJUSTO EQUIPMENT CO.
Bowling Green, Ohio

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the convenient Readers Service Form on page 201. Check the numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Vertically Pivoted Window for Air Conditioned Buildings

Series 55-A aluminum vertically pivoted windows, with full 360-degree rotation, are introduced by Truscon Division of Republic Steel for use in air conditioned

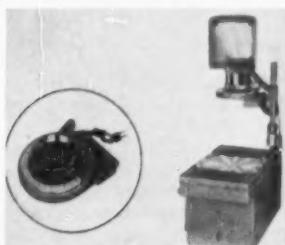


schools and other buildings. Windows are fitted with an automatic locking mechanism to hold them in the reverse position for easy cleaning. They can be used as self-contained units or vents can be added. The design permits accommodation of a down-and-out transom, an up-and-in hopper vent using the same outside pivoted frame section around the entire unit, or both. Double weatherstripping, with closed-cell sponge Neoprene around the entire perimeter of the vent, and glazing bead at the sill, designed to catch any condensation and prevent runoff to the interior, are other features. The double weatherstripped transom unit and hopper vent are available with either solid or tubular sections and hardware is white bronze and stainless steel. **Republic Steel Corp., 1315 Albert St., Youngstown 1, Ohio.**

For more details circle #1 on mailing card.

Beseler Polarizing Spinner Creates Motion Effects on Screen

A new dimension is added to overhead projection with the Beseler Polarizing



Spinner, an accessory for use with most Vu-Graph Projectors. Specially treated transparencies used in conjunction with the Spinner while it is rotated by motorized action create the effect of motion on the screen. The unit can also achieve such

effects as fade-ins, fade-outs and color changes by moving the same device manually through successive positions. The eight by nine by four-inch device consists of a polaroid disc mounted in a metal swivel action clamping ring that is driven through a special "edge drive" by an electric motor. **Chas. Beseler Co., 219 S. 18th St., East Orange, N.J.**

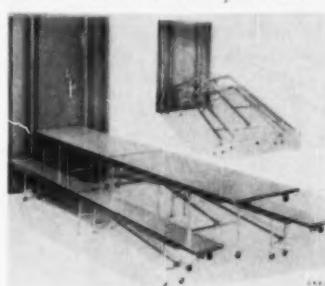
For more details circle #2 on mailing card.

Nine Accent Colors Added to Vitritile Line

Designed for use in areas where esthetic and decorative appeal are factors in architectural design are nine accent colors added to Natco's standard line of Vitritile ceramic glaze structural facing tile. The new colors are deeper, richer and more vivid than the standard field shades, and accent or harmonize with them. **Natco Corp., 327 Fifth Ave., Pittsburgh 22, Pa.**

For more details circle #3 on mailing card.

Uniframe Wall Cabinet Tables Stored in Out-of-the-Way Pockets



Cabinet wall tables that lock in out-of-the-way wall pockets, yet are available in seconds with the turn of a special unlock key, combine rugged strength and simplicity of design in their Uniframe construction. Providing greater flexibility of planning, the tables are manufactured in 24 models and sizes, with or without benches, and are stored in wall pockets from five to seven feet high that may be partially or entirely recessed or attached to the wall surface. **Smith System Mfg. Co., 212 Ontario St. S.E., Minneapolis 14, Minn.**

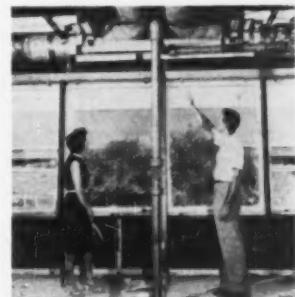
For more details circle #4 on mailing card.

Carrier System Cuts Heating-Ventilating Costs

Operating on the principle of high velocity induction, the new Carrier heating and ventilating system reduces costs in school installations. The system is similar to the forced warm air systems commonly found in homes, but more air is circulated and each outlet contains a coil for reheating room air induced through it. The

reheat coil acts like a baseboard convector at night and during weekends, reducing operating costs by eliminating the need to send warm air into the rooms from the central system during these periods.

The system can be installed originally



for heating only, with space reserved in the central equipment room for installing a water chiller later for cooling, plus the addition of an outside cooling tower. The cooling apparatus can be easily connected to the central system when desired, without disrupting school activities. The central systems permit maintenance to be concentrated in the machine room and reduces operating noises. Filtering apparatus is larger and more effective, and electronic filters can be added to the standard central filtering apparatus to ensure even higher quality air purification. **Carrier Air Conditioning Co., Syracuse 1, N.Y.**

For more details circle #5 on mailing card.

Aluminum Towel Dispenser Is Easily Maintained

The clean, rust-free appearance of the new Bay West towel dispenser is easily maintained with minimum care since it is formed of polished aluminum. Loaned free to users of Mosinee TurnTowls, the new cabinet was tested for two years in a school and in industry before being put



into production. Directions for use are permanently embossed on the front. **Bay West Paper Co., 1100 W. Mason St., Green Bay, Wis.**

For more details circle #6 on mailing card.

(Continued on page 160)

Series E Ten-Key Adding Machine Makes Multiplication Simple



Compactness, low silhouette and high speed operation are features of the Series E, a ten-key adding machine that is an electric companion model to the hand-operated "Little Giant." Multiplication is

performed as simply as addition with the new machine due to placement of the repeat key. Sturdily constructed and moderately priced, the readily portable unit is available in two models. Monroe Calculating Machine Co., 555 Mitchell, Orange, N.J.

For more details circle #7 on mailing card.

Trapezoid Water Cooler Has Space-Saving Design

The unique, space-saving trapezoid shape of the new General Electric wall and floor model water coolers permits drinking from either side as well as the front. Mounted flush to the wall for additional space saving, the unit has completely enclosed components, hiding pipes or valves from view. The wall unit is

especially practical for school installations, as it may be mounted at any height and simplifies floor cleaning. Available with a carafe-filler accessory for cafeteria use, the "new shape" coolers include feather-touch, finger-tip control; removable drain strainer for easy cleaning; no-squirt bubbler; anti-splash basin, and other features. General Electric Co.,



Commercial Equipment Dept., 14th & Arnold Sts., Chicago Heights, Ill.

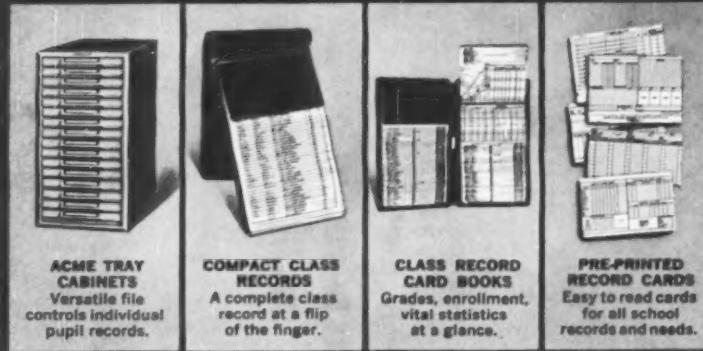
For more details circle #8 on mailing card.

Half-Ounce Clear Plastic Cups For Continental Jams and Jellies

Apple and grape jelly and strawberry jam are available in individual half-ounce portions packed in clear plastic cups with easily removed plastic covers. The jellies and jams are manufactured by a new process which restores their natural aroma and fruit essence, and are sold in cases of ten trays, each holding 20 individual portions. Continental Coffee Co., 2550 N. Clybourn, Chicago 14.

For more details circle #9 on mailing card.

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SIMPLIFY RECORD HANDLING TO KEEP PACE
WITH RECORD ENROLLMENTS**



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one-inch stainless steel tubular frame. The stainless steel tray shelves have raised lip edges and 180 trays, in sizes up to 15 $\frac{1}{2}$ by 20 $\frac{1}{4}$ inches, can be carried. Ten removable silverware containers with rounded corners, holding 100 to 120 knives, forks or spoons each, are held in the silverware housing, giving sufficient space to supply cafeterias, lunchrooms and multi-purpose rooms where food is served. Rotary ball bearing neoprene bumpers protect walls and doors when the dispenser is moved on its five-inch wheels with neoprene tires. W. H. Frick, 704 Citizens Bldg., Cleveland 14, Ohio.

For more details circle #10 on mailing card.

(Continued on page 162)

AT TULANE



The floor in Tulane Gymnasium, where all varsity basketball games are played, is finished with safe, durable, non-slippery Seal-O-San.

**“Seal-O-San, and good basketball
are teammates!” says *Cliff Wells***



Cliff Wells, Head Basketball Coach
Tulane University
New Orleans, Louisiana

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Free to coaches and athletic directors...
please write on your school letterhead.
Others send 50¢ handling fee.



“There is no substitute for fundamental training in basketball, and there is no substitute for Seal-O-San in surfacing your basketball floor,” says Cliff Wells. “Seal-O-San and good basketball floors are teammates. Speed and sure footing, which are so necessary in basketball, are insured by Seal-O-San. That’s why I specify Seal-O-San *must be used* on

the Tulane Gymnasium floor, where all varsity basketball games are played.”

Coaches like Cliff Wells insist on Seal-O-San. He has learned, through years of experience, that he can depend upon Seal-O-San with assurance that it produces the finest possible basketball playing surface. Test Seal-O-San in your school this year.

HUNTINGTON

...where research leads to better products

HUNTINGTON LABORATORIES • HUNTINGTON, INDIANA • Philadelphia 35, Pennsylvania • In Canada: Toronto 2, Ontario

**Sturdy Student Desk and Chair
In Wide Range of Sizes**



A sturdy, adjustable unit, the 212 Series Student Desk has 18-gauge steel panels with one-inch 18-gauge upper leg sections and $\frac{3}{8}$ inch 16-gauge lower sections. Available in two sizes for all twelve



From the craftsmen who have produced more school sound systems than any other manufacturer, comes another superb teaching tool—the Medallion—the language laboratory as new as tomorrow in beauty, in construction and, above all, in educational effectiveness. ¶ Completely and uncompromisingly designed "from the ground up" to meet every one of your language teaching needs, the Medallion has so many exclusive improvements that it truly can be called "the ultimate in language laboratories." ¶ Take, for example, the baffling problems of *where to begin* and *how far to go* when planning a laboratory for your school system. These are solved by the Medallion's extreme adaptability to differing kinds and levels of teaching. The Medallion offers unmatched flexibility and expandability to grow along with your curriculum. ¶ Thus, it allows you to begin with a simple audio-passive system serving perhaps only a few students. As the curriculum grows and faculty skills develop, this method can be augmented by an audio-active system. Finally, for optimum learning, audio-active-compare functions can be added. ¶ As classes increase in size, more student accommodations can be installed when and as required, without rendering obsolete any of the previous investment. These progressive modifications are simple, quick, and economical, thanks to the most advanced type "plug-in" electronic components and "snap-together" mechanical construction. ¶ From brilliantly engineered high-fidelity circuits (with fully transistorized amplifiers and power supplies) to the beautiful and durable accommodations for individual students, the DuKane Medallion language laboratory is beyond question the finest and most thoroughly researched equipment available to schools today. Every school should have our descriptive literature as a basis of comparison.

"the ultimate in language laboratories"



Write Dept. NS-110

DuKANE
CORPORATION
St. Charles, Illinois

grades, in heights from 22 through 29 inches, and in five colors, the unit has as its companion the 45 Series Cluster Chair. With 16-gauge tubular steel legs and a scroll seat and back of 5-ply birch or maple veneer, the form-fitting chair is available in eight sizes from 11 through 18 inches. **American Desk Mfg. Co., Temple, Tex.**

For more details circle #11 on mailing card.

a dual-injection water distribution system that prevents clogging of the line and keeps the machine clean and odor-free, and a delayed water shut-off permits additional water to enter the disposer if it is turned off before the waste line is clean, ensuring proper flushing of the drain. A touch of the hand to the neoprene curtain allows accumulated trimmings to drop onto the throat of the grinder and the self-

**Water Distribution System
Keeps Disposer Clean and Odor-Free**

Designed for large kitchen installations, the Hobart Model FW-500 is a self-contained, vertical, free-standing disposer with a 32-inch square table and a cone-type feed chute. The five h.p. unit features



feeding machine can be filled with food waste while it is idle. **Hobart Mfg. Co., Troy, Ohio.**

For more details circle #12 on mailing card.

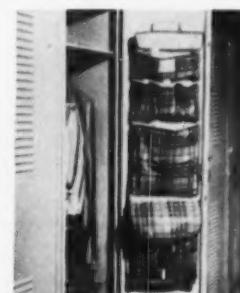
**Model MC-560 Cooler
Has Removable Doors**

Model MC-560, a new, low refrigerated cooler, may be operated wet or dry and has capacity for 560 half-pint cartons of milk or 300 seven-ounce beverage bottles. With both outer shell and inner liner of heavy gauge steel, the cabinet is only 31 $\frac{1}{4}$ inches high and is finished in white baked enamel with stainless steel trim. The two stainless steel doors operate on individual tracks and may be removed from the cooler during rush periods. **Schaefer, Inc., 801 Washington Ave., Minneapolis 1, Minn.**

For more details circle #13 on mailing card.

**Handy Hanging Storage
Also Carries Athletic Equipment**

A convenience for the storage and carrying of athletic equipment for each player is offered in the Tote-N-Hang bag. Pockets of varying sizes and shapes in the bag hold the articles required by a player, ready for immediate use when hung on the inside of the locker door, yet pro-



tected when neatly folded into the compact, carrying case with double handles for taking on team trips or to other areas of the athletic department. The Tote-N-Hang is covered in attractive Scotch plaid. **Tote-N-Hang, P.O. Box 1817, High Point, N.C.**

For more details circle #14 on mailing card.

Greater Menu Variety With Campbell Counter Kitchen

The new Campbell Counter Kitchen offers a wide variety of soups and other hot foods, and provides the additional benefits of uniformity of flavor and quality, savings in time and labor, and elimination of waste or carry-over. Designated the "E-5," the 18½ by 20¾-inch unit features an all stainless steel base; chrome-plated



front control panel; two automatic electric timers with two and three-minute cycles; automatic warning signal; four-color menu sign, and a 36-can chrome-plated display rack. **Campbell Soup Co., 375 Memorial Ave., Camden, N.J.**

For more details circle #15 on mailing card.

Foot Size Chart Offered Free by Council

The National Foot Health Council offers a Foot Size Check Chart free to schools for distribution to pupils to help prevent foot defects. Statistics published by the Council indicate that 75 per cent of American children have foot defects by the time they graduate from high school, caused primarily by poorly fitting shoes and socks. The chart consists of a Size Scale on one side and instructions for foot care on the reverse. It folds twice into a three by 4½ inch card and has room for four measurements. **National Foot Health Council, P.O. Box 57, Rockland, Mass.**

For more details circle #16 on mailing card.

Dearborn Paint Stripper Has Wool Felt Roller Applicator

The Dearborn Paint Stripper, an easily maneuvered, moderately priced one-man



machine, paints straight, circular and curved lines on gymnasium floors, tennis courts, parking lots, football fields and other areas. The friction-drive, noiseless unit requires no gasoline or electric motor and paints with a wool felt applicator roller. Constructed of aluminum and steel, the 35-pound paint stripper is readily

dismantled for equipment changes and movement between work locations, and is available with interchangeable optional equipment, including various width rollers. **R. E. Muncey, Inc., P.O. Box 387, Birmingham, Mich.**

For more details circle #17 on mailing card.

3x Illuminated Magnifier for Accurate Examinations

An inspection aid for quick, accurate examinations of small objects is provided with the new Bausch & Lomb 3x Illuminated Magnifier, which features full corrected 3x magnification and a wide field of view. The instrument rests securely on any flat surface, allowing complete freedom of both hands, and is designed

to produce even illumination covering the entire area under examination. Compact



and light weight yet durably constructed, the unit has wide application in the school. **Bausch & Lomb, Inc., 645 St. Paul St., Rochester 2, N.Y.**

For more details circle #18 on mailing card.

(Continued on page 164)

SLATE IS IN STYLE AGAIN



The modern trend in chalkboards is back to natural slate.

There are several reasons for its continuing — and growing — popularity:

- Ageless in appearance
- Easy to maintain
- Maximum service at minimum cost
- So easy to write on and erase
- Above all, has unduplicated visibility

Write for free booklets giving authoritative information on natural slate chalkboards for your school.

PENNSYLVANIA SLATE PRODUCERS GUILD, INC.
Pen Argyl, Pennsylvania

sponsored by producers of Pyramid and Keystone American natural slate chalkboards



ACME CHEMICAL?

*they're on our
honor roll*



One of the really good firms I've dealt with in my 22 years as a schoolman.

Acme Chemical are *manufacturers*. They control what they make, from start to finish, so they *know* just what each product will do for us.

We've always found Acme Chemical products performing exactly as we were told they would.

Take this floor. It's protected by Saber®. Saber is Acme Chemical's new resin emulsion floor coating. They worked on it for years before they sold a gallon of it. Told us it would outwear any coating we ever used—and it does! When was it put down? A year ago—and it's still on the floor. Looks like it was put down yesterday, doesn't it? Performs for us just as our Acme man said it would.



Saber is one of 80 fine products made by the Acme Chemical Company. Your Acme man will be happy to demonstrate it for you.

ACME
Chemical Company

FOR OVER FIFTY YEARS QUALITY AND SERVICE

Milwaukee, 5, Wisconsin

Maintenance materials for the School Building . . .
serviced to your satisfaction

Pic-A-Rack System Facilitates Dish Handling

A two-part rack for use with dishwashing machines, which leaves half the weight in the machine, is offered in the Seco Pic-A-Rack. A metal carrier takes the filled lightweight plastisol racks through the dishwashing machine. The racks full of clean dishes are then lifted out of the



carrier, which remains for the next use, and stored in the serving area. Color coded in red, blue and yellow plastisol for easy identification, Pic-A-Racks hold cups, glasses, and silver and also include an open utility rack. The chrome plated carriers can take many combinations of racks, and since they are used only to protect and carry the Pic-A-Racks through the dishwasher, only one carrier is needed for every four to ten racks. **Seco Co., Inc.**, 4560 Gustine Ave., St. Louis 16, Mo.

For more details circle #19 on mailing card.

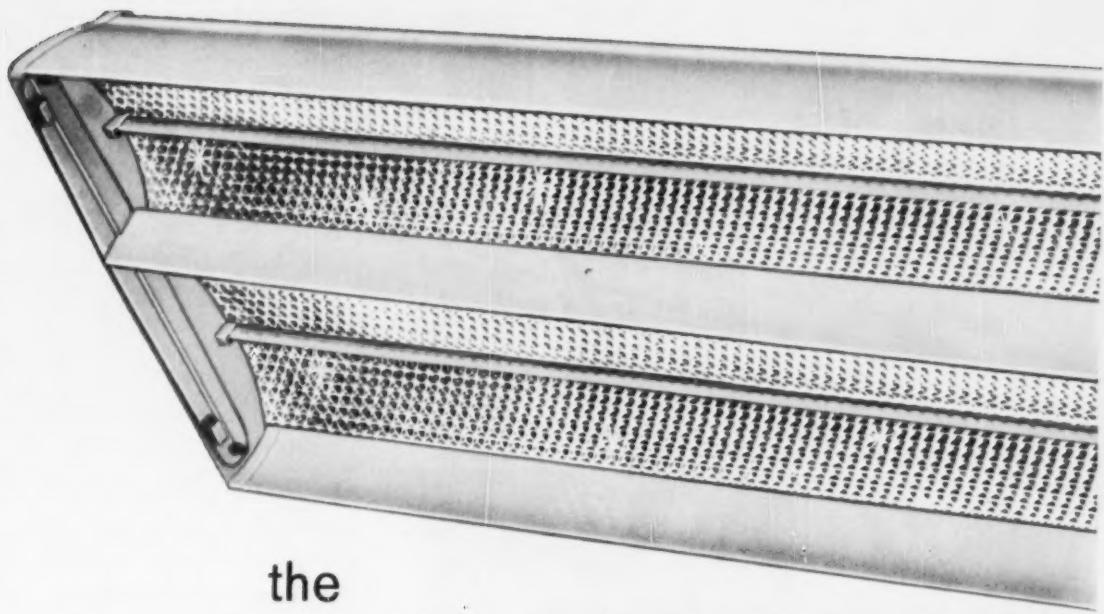
Practical Language Laboratory A Low-Cost Component System

A portable, low-cost component language laboratory system to fit budget or space problems is offered by Switchcraft. A deluxe control center with an unusual range of operation, the Student Amplifier, Model 680, is the heart of the laboratory and includes microphone and headphone jacks with separate volume controls on the front panel and three circuit jacks for the power supply and program source on the back panel. A high impedance Monitor



Phone Jack and a medium impedance Monitor Phone Jack are for instructor monitoring of each student, and the Model 680 allows the student to listen to the lesson and hear his voice as he repeats it, while enabling the teacher to listen to each student's practice lesson. The Model 682 Power Supply, a precision built, well-filter unit, delivers up to 15 Volts D. C. and will handle up to 20 Student Amplifiers. The Switchcraft system can be adapted to any school's set-up with the addition of optional accessories. **Switchcraft, Inc.** 5555 N. Elston Ave., Chicago 30.

For more details circle #20 on mailing card.
(Continued on page 166)



the
TRIUMPH
a new luminaire
best for
all-round
school use

Yes, we went to the experts to find out exactly what design and operating features should be included in a luminaire specified for classrooms. The answers we got from a select group dictated the development of the Triumph—a rugged, easy-to-maintain, distinctively attractive innovation in lighting efficiency.

Prismatic lens—new approach to light distribution. Recessed, crescent-shaped prismatic lenses, together with scientifically shaped side panels, provide balanced distribution with no objectionable brightness.

Serene styling blends with architecture. Slim, trim simplicity and subdued sparkle harmonize with surroundings.

Easy to clean—stays clean longer. There are no dust-collecting flat areas, deep grooves or difficult corners in the Triumph's streamlined design. Curved lens sheds debris. Air circulation cleanses interior. All surfaces are readily accessible. An occasional swish or two with a dust cloth keeps the Triumph looking spanking new.

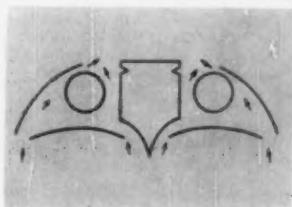
Sturdy construction. Looks sturdy—is sturdy. Westinghouse attention to detail assures quality . . . guarantees long life.

Variety of design. The new Triumph can also be supplied with metal louvers and with double-walled illuminated plastic side panels. For complete information, write Westinghouse Electric Corporation, Lighting Division, Edgewater Park, Cleveland, Ohio. *You can be sure . . . if it's Westinghouse.*

J-04476

Completely Ventilated

Air flow keeps interior clean and lowers operating temperature of ballast and lamp. Curved lens sheds debris.



Westinghouse



The most economical flag you can buy is Dettra's high-quality cotton bunting BULL-DOG brand. Bull-Dog bunting exceeds U.S. Government specifications for Type B cotton bunting on all counts—tensile strength, color fastness and wearability. Bull-Dog flags have been used continuously by the U.S. Government since 1915 when John Dettra submitted samples for tests. As a result of those tests, the Government issued a new set of specifications based on *Dettra's Bull-Dog Bunting*. Insist on Bull-Dog Flags for economy.

Dettra flags and banners available in stock or made to order in a wide range of superb fabrics for indoor and outdoor use. For FREE SAMPLES, literature, prices and name of nearest Dettra Dealer, write Dept. N. 1.



DETTRA FLAG CO., INC.

Oaks, Pennsylvania

Small Low Priced Popcorn Machine In Manley Model 126, Jewel

Model 126, Jewel, is a small, low-priced counter popcorn machine with an eight-ounce kettle that will turn out a half-pound of popped corn every three minutes. The 20 by 30 by 31½-inch unit has a well lighted, glass enclosed case with enamel and chrome trim, a heated cabinet



floor and a red, illuminated dome, the trademark of all Manley Popcorn Machines. It operates on a normal 110-volt circuit. Manley, Inc., 1920 Wyandotte Ave., Kansas City 8, Mo.

For more details circle #21 on mailing card.

Addition to Vul-Cot Line Is Fire Resistant Receptacle

Made with Pyronil fibre, a material that will not support combustion, the new Vul-Cot Waste Basket can be used wherever a fire hazard is present or where safety laws require the waste basket must be intact after its contents are consumed by fire. A recessed bottom is an added advantage, as there is practically no heat transfer and burning of the floor under the basket is prevented. Supplied in standard colors, the fire resistant receptacle is available in all but rectangular or half round models. National Vulcanized Fibre Co., Maryland Ave. & Beech St., Wilmington 99, Del.

For more details circle #22 on mailing card.

Wall-O-Matic Cleaning Machine Utilizes Compressed Air

A noiseless, non-electric wall cleaning machine called the Wall-O-Matic utilizes compressed air for continuous eight hour operation. The air powered machine



thoroughly cleans walls and revitalizes painted surfaces with no dripping or streaking and may be used in busy rooms without disturbing normal routine and activity. Using a special cleaning solution, the portable unit may be used on all types of walls and many types of acoustical ceilings, and a spray nozzle attachment cleans hard-to-get-at places and irregular shaped objects. Central States Maintenance Co., 125 Marion, Oak Park, Ill.

For more details circle #23 on mailing card.
(Continued on page 168)

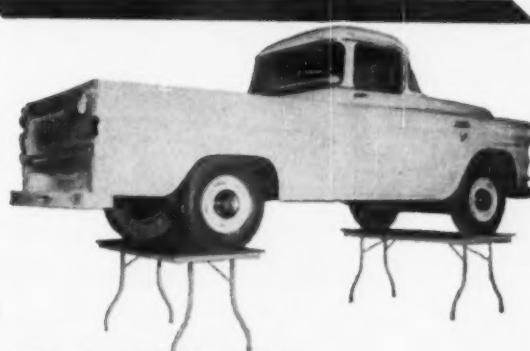
The NATION'S SCHOOL



NOBODY and NOTHING
CAN FALL THRU A HUSSEY CLOSED DECK
ROLL-OUT GYM SEAT — there's no opening
It's designed for the safety of enthusiastic, excited
spectators.
It's the only gym seat with a completely Closed Deck.

Write or phone collect for free catalog and details.

HUSSEY MANUFACTURING CO., INC.
20 RAILROAD AVENUE NORTH BERWICK, MAINE



PROVEN STRENGTH!

Actual photograph above hints at the rugged, long-haul strength of Metwood tables. This tri-balance strength performs in some of America's finest institutions. Send for literature today, without obligation. Find out why professional buyers who check and test—choose Metwood!

Metwood
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FOLDING TABLES

FUND-RAISING
BOOKLET FREE!
A service for clubs,
churches, etc. Write
without obligation!
Hanover, Pa.



Soundguard

... new folding partition separates
both space and sound effectively

You can now assure quietness in classrooms—contain cafeteria noises—divide lab and auditorium areas effectively . . . with SOUNDGUARD. Soundguard is the folding door that offers maximum sound reduction. This is due not only to Soundguard's denser sound insulation within the partition itself, but also to the complete perimeter sealing—the tight seal that blocks sound from passing around jams and operating edges. An outstanding Soundguard feature!

Soundguard has a rugged steel frame covered with beautiful vinyl fabric which withstands abuse—assures long, active life and easy maintenance.

Other FOLDOR models include narrow profile doors for wardrobe applications. There's a FOLDOR door or partition for every school use.



... new and different, functional and decorative. A $\frac{3}{4}$ " thick styrene grillework in standard designs, factory fabricated in customized panels. Ideal as space dividers and screens. FiliGrille is offered in a variety of complete framing systems adaptable to any school application.

Holcomb & Hoke Mfg. Co., Inc. Dept. A-1234
1545 Van Buren Street, Indianapolis 7, Indiana

Please send complete information on:

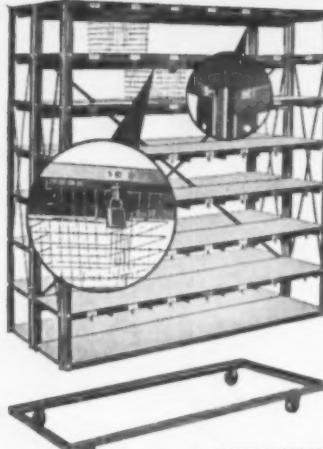
FOLDOR Soundguard FiliGrille grillework

NAME _____

ADDRESS _____

CITY _____ STATE _____

Any Size
GYMNASIUM
**BASKET
RACKS**
WITH RECESSED HASPS



A CASTER ASSEMBLY
Made to fit any single or double
rack, may be added or removed at any time.

Insist on Neubauer Basket Racks for
these exclusive features:

1. Rigid twin-post corners make the whole rack stronger,
2. Your choice of any size to fit odd baskets or limited space*,
3. Easier assembly, hasps and dividers installed at the factory,
4. Recessed hasps can't snag clothing or cause injury, (Hasps omitted if desired) plus a choice of four popular baked enamel finishes, plated hardware, sturdy bracing, and other details of quality.

**STORAGE
SHELVING**
with patented
twin-post corners



AND
**LIBRARY
SHELVING**

with beautifully finished end
panels, can be furnished in
any size to fit your room
dimensions. Baked enamel
colors are green, grey, tan and
beige.

*No extra charge

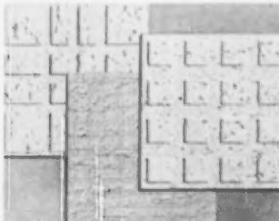
You don't pay a premium for odd sizes
when you buy Neubauer racks and shelving.

Neubauer

MANUFACTURING CO.
817 LOWRY AVENUE N.E.
MINNEAPOLIS 16, MINN.

**Three-Dimensional Patterns
in Celotone Acoustical Tiles**

Interesting textural effects and joint concealment are offered in the three dimensional patterns of the six incombustible mineral fiber ceiling tile designs recently introduced by Celotex. Included are Empress Design Celotone with uni-



form squares in soft relief; Modulo Design Celotone, suggestive of a modular screen in low relief; Monarch Design Celotone with formal geometrics in relief; Striated Mufflestone in large panels for fast installation, with washable thermoplastic vinyl paint finish; Serene Perforated free-flowing pattern of miniature "sound traps," and Chase Celotone, designed for a special installation. The Celotex Corp., 120 S. La Salle St., Chicago 3.

For more details circle #24 on mailing card.

**Breaded Veal Drumsticks
Are Portion-Control Item**

A new portion-control item, breaded drumsticks of choice chopped veal for school lunch feeding operations are an addition to the Pfaelzer Brothers line. Sold in 10-pound boxes containing 80 pieces, the drumsticks weigh two ounces each, are placed on skewers for easy handling and are ready to be deep fat fried or baked. Pfaelzer Brothers, 939 W. 37th Pl., Chicago 9.

For more details circle #25 on mailing card.

**High-Speed and Heavy-Load Operation
With All-Purpose Scrap-Master**

A large water-scrap-trough allows two or more operators to work at the same time, permitting both high-speed and heavy-load operation with the new, all-purpose Salvajor Scrap-Master water scrapping machine. Food waste is flushed



away from soiled dishes and trays under a heavy plume of warm re-circulated water which carries it to the heavy-duty grinder for shredding. Even such waste as bones and cartons is easily disposed of in the grinder, and an effectively designed salvage basin traps any tableware accidentally dropped in the machine. Salvajor Co., 7235 Central, Kansas City 14, Mo.

For more details circle #26 on mailing card.
(Continued on page 170)

**LOWER
YOUR
COSTS** WITH



**COLORPRINT™
MAPS & ATLASES**

**GIANT 50" x 38" MAPS only 29c
UP-TO-DATE . . . IN FULL COLOR**

At this low price, every student can have his own big map for study in class . . . and at home! Widest selection available includes WORLD, U.S.A., EUROPE, SO. AMER., NO. AMER., PACIFIC, ASIA, AFRICA, CANADA, NEAR EAST, plus SOLAR SYSTEM, STAR CHART, Bible Lands, Story Land.

**16 pp. WORLD ATLAS, only 29c
Many others 29c to \$5.95**

Complete line of CLEARTYPE DESK OUTLINE MAPS: all states with county boundaries, plus 4 types, 3 sizes in Countries, Continents, World.

Attractive quantity discounts.

Send For Free School Catalog Today.


SCHOOL DEPARTMENT
AMERICAN MAP COMPANY, INC.
3 West 61st Street • New York 23, N.Y.



**End messy
board washing
for just \$1.25**

New K₂ Kleer-Kleen chalkboard cleaner ends tedious, messy, bucket-of-water washing . . . eliminates streaky, faded looking boards. A wipe of a Kleer-Kleen-dampened cloth cuts through chalk haze and "ghost" marks . . . leaves the surface conditioned for easier, more thorough erasing. Compounded by the nation's leading manufacturer of chalkboards, it promotes legibility by maintaining the clear contrast between board and chalk. Available direct at \$1.25 a pint, \$2.00 a quart. Pint normally lasts a full semester for a typical classroom. *Not recommended for stone slate chalkboards, because of their porosity.*

Send . . . Quarts
(Quantity) Pints of K₂ Kleer-Kleen
along with invoice.

NEW YORK
BOOK SLATE COMPANY INC.

SILICATE
600 Old Country Road
Garden City, New York



C. A. Coker, Business Manager,
Niles Township High School.

BURROUGHS TYPING ACCOUNTING MACHINE PROVIDES TIGHT BUDGET CONTROL—AND AMPLE CAPACITY FOR YEARS OF GROWTH

The scene: Niles Township High School, Skokie, Illinois. **The job:** All financial and accounting activity, including a 350-person payroll. **The equipment:** Burroughs F-1501 Typing Accounting Machine. **Benefits for today,** in this big business of education:



Tight budget control, postings up to date daily, completion of expense statement only three days after closing the books. **Benefits for tomorrow:** Though enrollment will double in the next three or four years, the F-1501 has the capacity to handle the commensurate increase in accounting load while maintaining its accounting efficiency without additional equipment investment.

Burroughs—TM

Burroughs automation equipment can help your school or district to new levels of accounting productivity and capacity. For details, see our new film "This Business of Education." Call our nearby branch. Or write Burroughs Corporation, Detroit 32, Michigan.



Burroughs Corporation

"NEW DIMENSIONS / in electronics and data processing systems"



Look what happened to school office paperwork!



Bruning's amazing new Copyflex 105 copying machine *costs no more than a typewriter*, saves hundreds to thousands of dollars annually in the preparation of transcripts of student records, progress reports, schedules, accounting reports, examination sheets, purchase orders and a host of other paper work.

With Copyflex 105, you type or write information only once on one original form or sheet. From the orig-

inal, you make sharp, clear Copyflex copies—in seconds—at the low cost of 1¢ each for letter size for materials. Information can be added, changed, or blocked-out on the original, at any time, and Copyflex copies again made of the up-to-date or revised original. No typing. No proofreading.

You owe it to yourself and your school to investigate the remarkable low-cost Copyflex 105, by mailing the coupon below.

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Charles Bruning Company, Inc., Dept. 11-88
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Please send me more information about
your new Copyflex 105.

Name _____ Title _____

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Long Life and Low Maintenance With Aluminum Utility Truck

Constructed of corrosion resistant heavy duty aluminum for long life and low maintenance, the Wear-Ever No. 5465 Utility Truck with interchangeable accessories is adaptable for many uses in schools and other institutions. The aluminum base provides strength without



extra weight, and the bed features welded corners and is mounted on caster brackets of aluminum sheet. The unit has a one-inch handle and eight-inch rubber tired casters with a weight load of 250 pounds each. Also available are side and end panels that slide into place to form a panel truck. Wear-Ever Aluminum, Inc., New Kensington, Pa.

For more details circle #27 on mailing card.

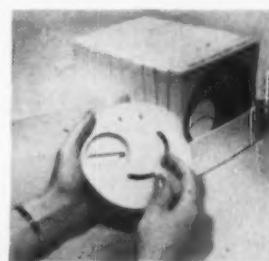
Electroplated Mop Sticks Have Rugged Construction

Electroplating provides the new models 93 and 937 mop sticks with an improved appearance, and stronger construction throughout permits them to withstand the most strenuous use. The sticks feature a special swedge on the $\frac{1}{8}$ inch center bolt that ensures firm positioning of the mop, and the bail is formed to fit securely into a socket to prevent loosening or slipping. White Mop Wringer Co., Fultonville, N.Y.

For more details circle #28 on mailing card.

Flash-X Tachistoscope For Individual Use

A student can practice seeing skills on his own or learn new visual material with the Flash-X, a tachistoscope which can be used individually or in teams. Discs

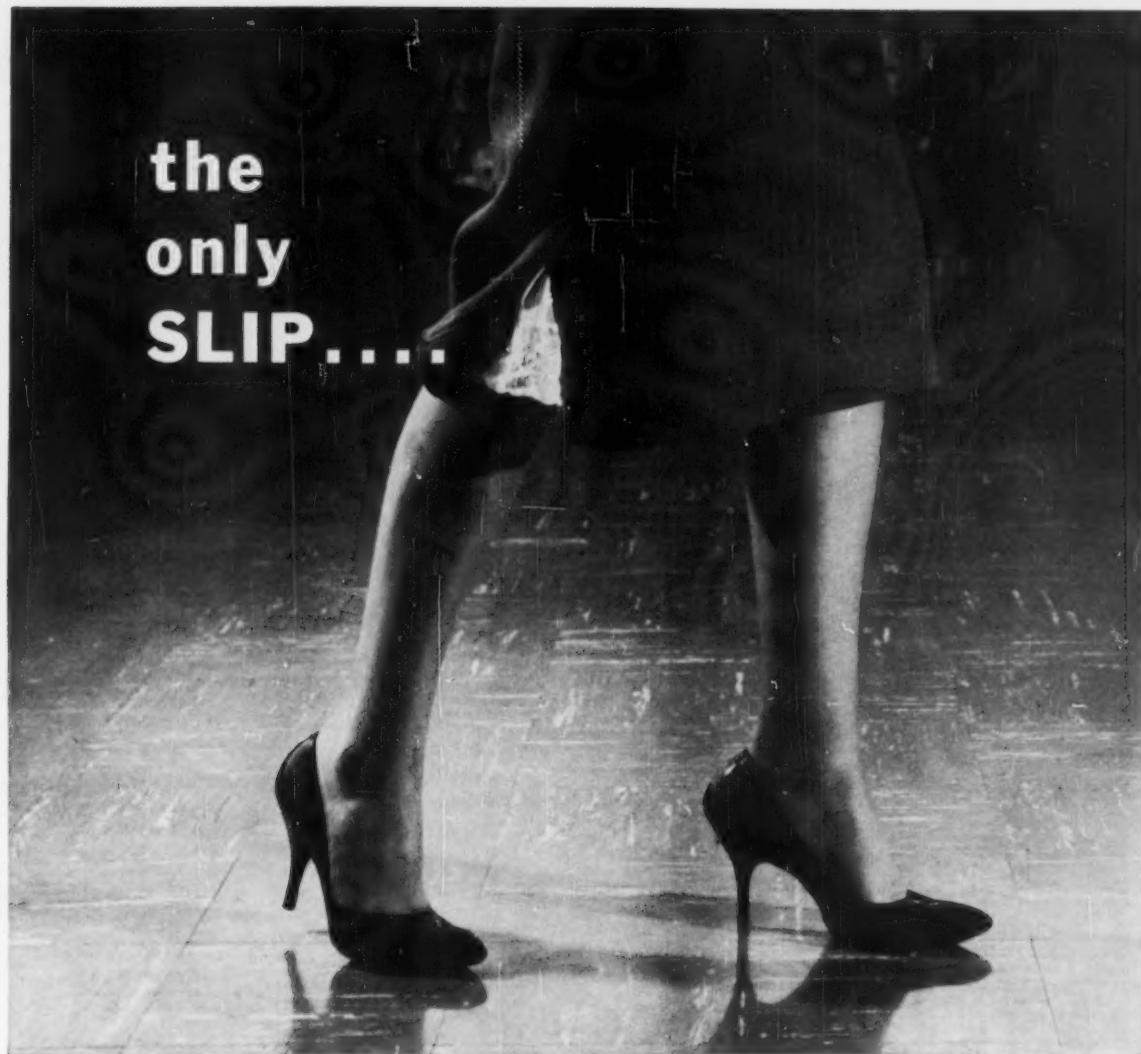


easily rotated for successive material are inserted into the durable, all-metal unit which has a single exposure speed of 1/25 second and a manual check window. Training discs with 40 exposures are available in 18 graded sets, as well as blank discs that make possible the preparation of special materials. Educational Developmental Laboratories, 75 Prospect St., Huntington, N.Y.

For more details circle #29 on mailing card.

(Continued on page 172)

the
only
SLIP. . .



**...you'll see on a floor protected
by Holcomb Anti-Skid Wax!**

Slip-resistance is one quality you're always sure of with Holcomb ANTI-SKID WAX.

And you get this "most wanted" feature of safety with no sacrifice in durability and floor beauty.

In fact, Holcomb ANTI-SKID WAX is scientifically designed to bring to your floors a rich, velvety sheen that gives your "housekeeping" a mark of distinction.

Let your Holcombman show you how ANTI-SKID WAX will give your floors *safe beauty* . . . at half your present costs—or even less. For the name of the Holcombman in your community write:

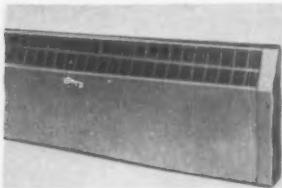
J. I. HOLCOMB MFG. CO., INC. • 1601 BARTH AVENUE • INDIANAPOLIS, INDIANA

Hackensack • Dallas • Los Angeles • Toronto



*All Holcomb waxes
are listed slip resistant
by the
Underwriters Laboratories.*

**Sunnywall Finpipe Radiation
for Minimum Space Areas**



Maximum heat output in minimum space is supplied with the new Crane Sunnywall type N finpipe radiation. Developed for institutional use, the neat lines of Sunnywall enclosures lend themselves to modern interiors and units are available in a variety of enclosures and

accessories for simplified installation. The complete line of fintube radiation provides clean convection heating with either forced hot water or steam radiation. **Crane Co., P.O. Box 780, Johnstown, Pa.**
For more details circle #30 on mailing card.

**Polyethylene Waste Liners
Speed Lunchroom Cleanup**

Designed especially for use in large waste receptacles in school lunchrooms, the new Polyethylene Drum Liners speed cleanup with improved sanitation. Lined receptacles are placed at the end of each row of tables, permitting waste of all kinds to be thrown or wiped into them. The plastic bag, folded over the outside top of the can, is drawn up and tied for

removal, closing in odors and preventing spilling of refuse. Time is saved in removing waste and in maintenance as there is no rust problem from spilled or emptied liquids since the liners are waterproof and drums require no cleaning. The neat appearance and convenient placement of the containers as illustrated in use in the lunchroom at New Trier High School, Winnetka, Illinois, encourages cooperation



and neatness by students. **Central States Paper & Bag Co., Inc., 5221 Natural Bridge, St. Louis 15, Mo.**

For more details circle #31 on mailing card.

**14-Inch Tilt-Disc Sander
Has Unitized Assembly**

The unitized tilting disc assembly feature of the Yates-American 14-inch Tilt-Disc Sander combines direct motor drive, sanding disc and heavy, cast iron safety guard, and allows the use of a wrap-around stationary work table which remains flat and level and permits easy, accurate finishing of curved or irregular shaped work pieces. Precision adjustment of the disc tilt is readily made with a handwheel located in front of the machine, the degree of tilt is indicated on a graduated scale and the handwheel is set by locking a knob. **Yates-American Machine Co., Beloit, Wis.**

For more details circle #32 on mailing card.

**50 Line Exit Sign
Is "Wafer Thin"**

A compact, code-regulated Exit sign, McPhilben's "wafer thin" 50 Line features all cast aluminum construction, precision-stenciled face or glass inscription

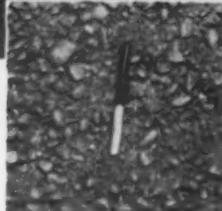


panels, two-circuit wiring for either incandescent or fluorescent lamps, an integral downlight that provides illumination in case of an emergency, and an internal cast hinge-and-lock that eliminates all external hardware. With a satin aluminum finish and a baked-on, clear lacquer protective coating, the unit is designed for surface, wall, ceiling, pendant, extending bracket or recessed mounting. **McPhilben Lighting, Inc., 1329 Willoughby Ave., Brooklyn 37, N.Y.**

For more details circle #33 on mailing card.

(Continued on page 174)

WALK-TOP Surfacing Reduces Wear On Shoes... Clothes... And Kids!



Compare the smooth, grit-free Walk-Top surface above with the ordinary pavement shown right. You will easily see why this non-abrasive material reduces wear on children's shoes and clothes to a minimum.

Walk-Top "saves kids," too! Observation has proved that surfacing playgrounds with Walk-Top reduces both the number and seriousness of abrasions resulting from falls.

Across the nation, school officials in small communities and large are specifying Walk-Top for school yard pavement sealing. In Los Angeles, for instance, more than 30,000,000 sq. ft. of such areas have been Walk-Top surfaced in the last few years.

For complete information on Walk-Top, the trouble-free surfacing for your play areas, contact our nearest office.



American Bitumuls & Asphalt Company

320 MARKET, SAN FRANCISCO 20, CALIF.
Perth Amboy, N.J.
Baltimore 3, Md.
Cincinnati 38, Ohio

Atlanta 8, Ga.
Mobile, Ala.
St. Louis 17, Mo.
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Portland 8, Ore.
Oakland 1, Calif.
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BITUMULS® Emulsified Asphalts • CHEVRON® Paving Asphalts • LAYKOLD® Asphalt Specialties • PETROPLASTIC® Industrial Asphalts

THE MUSIC HALL

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Adaptability Unlimited
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Classroom
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in the Home

Practical in size

Big in volume

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Distinctively styled



There is never any question when your piano is a Mason & Hamlin

Write for description and name of nearest dealer

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Division of Aeolian American Corporation • East Rochester, New York

For all-round deodorizing...



ROUNDS

Fragrant, laborless
deodorant discs for urinals,
bowls, garbage pails, lockers, closets

Deodoroma ROUNDS cost in use averages only a fraction of one cent a day. Rounds are formed under 70,000 pounds pressure; are dense and durable. Fragrance is locked in; lasts until the last particle has vaporized—there's no harsh "moth cake odor." Packed eight to the telescoping box—each Round sealed airtight—easy-to-shape Holzit wire holder in every box. For literature write to The C. B. Dolge Company, Westport, Conn.

For free sanitary survey
of your premises ask
your Dolge service man



WESTPORT, CONNECTICUT

Scoremaster

FIRST CHOICE IN LEADING SCHOOLS

VISITORS	FOUL	MIN.	SEC.	FOUL	HOME
GODFREY	58	74	1 2 3 4	74	PIKON
BROWN	23				YOUNGS
PELTON	53				WALBY
CONWAY	45				HEAD
DONALDS	35				MCALPIN
JARILL	51				SUTCLIFFE
BERESFORD	13				CHENK
WARREN	50				DILLON
ENGLE	55				MONTEA
BALLET	17				SYKES
HIMES	79				MALLORY
SHEDY	68				BERRY

The widely used Scoremaster Model 250-6 is now available, as Model 255-66, complete with Name Panels listing the names and numbers of 12 players on each team; Foul Panels indicating five individual player fouls, and with Officials' Panel. Complete and informative.

Other variations are the Model 254-66, showing Name Panels, Foul Panel showing four player fouls and player-in-game indicating lights, and Officials' Panel, and Model 253-66, with Player and Officials' Panel only.

Write today for complete descriptive literature on these and other Scoremaster Scoreboards.

THE M. D. BROWN CO.

2233 Lake St. MUTUAL 3-3100 Niles, Mich.

"When Split-Seconds Count, Count On Scoremaster"

**Silv-O-Tainer Line
Of Marlex Plastic**



Marlex, a virtually indestructible plastic, is employed in the new Silv-O-Tainer line of equipment designed for the efficient, sanitary handling of flatware. Bas-

ket-type cylinder holders are light weight, easy to handle and keep clean, and attractive in appearance for use in lunchrooms and cafeterias. A rack that can support 300 pounds is available in counter-top and under-counter styles and, like the cylinders, does not stain, corrode or pick up food odors. **Bloomfield Industries, Inc., 4540 W. 47th St., Chicago 32.**

For more details circle #34 on mailing card.

**Plastic-Laminated Faced Doors
Have Anodized Aluminum Louvers**

Pre-finished, installed, extruded anodized aluminum louvers are now built into Chemclad plastic-laminate faced doors. The Chemclad "sightproof" louver or door grille incorporates a special in-

verted "Y" design for added stability and easy cleaning. The anodized aluminum construction resists wear and all grilles are centered in the doors with matching aluminum stops for uniform appearance on both sides. Furnished in any desired size, the units are available on the Chem-



clad line of pre-finished, pre-mortised doors and partitions. **Bourne Mfg. Co., 1573 E. Larned St., Detroit 7, Mich.**

For more details circle #35 on mailing card.

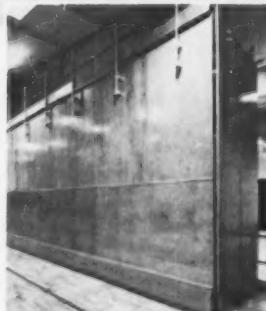
**Aluminum Foil Metal-Cals
Identify Property**

Manufactured to order in a wide variety of colors, in either matte or bright finishes, Metal-Cals provide quick identification of property in the school. They are lightweight appliques which may be applied in seconds without tools or fasteners and resist wear and weather. Designed for use on equipment as a deterrent to unauthorized "borrowing," Metal-Cals can be numbered serially at the factory or through use of any typewriter. When combined with a property listing, they are also helpful in adjusting claims in case of fire or other disasters. **C & H Supply Co., 415 E. Beach Ave., Inglewood, Calif.**

For more details circle #36 on mailing card.

**Dish Receiving Station
for Automatic Dishwashing**

A large stainless steel table area above the rack transporting unit for collecting and segregating all types of dishes and silver is now added to the Adamation Dishwashing System. Designed to increase the flexibility of the system, the unit has a food soil chute and will hold a silver presoak. Over shelves are provided for glass and cup racks. The Re-



**MAXIMUM USE OF
ALL AVAILABLE FLOOR SPACE!**

A space saver for balcony installations...
• **SAFE**

EZ-A-WAY Forward Close-Delayed Action Gym Seats cannot overturn. Our new floor track design provides positive floor attachment in every position.

• **CONVENIENT**

EZ-A-WAY Forward Close-Delayed Action Gym Seats are easy to use... swinging rear riser board offers plenty of toe space for opening... gym seats can be locked in the open or closed positions.

• **MODERN**

EZ-A-WAY Forward Close-Delayed Action Gym Seats offer maximum utilization of available space. When closed they form a wall to separate a balcony into a modern room - for gym classes, dances and any other school activities.

Write for complete details and engineering data for your requirements.



BERLIN CHAPMAN CO.
BERLIN, WISCONSIN

FEATURES . . .

- Furnished with and without rear seat.
- Rear riser board may be swung up for opening and closing bleacher... plenty of toe space for operator.
- Positive foolproof linkage to floor.
- Owners can have peace of mind that bleacher cannot be pushed over edge of balcony even under abuse.
- Floor attached bracket and track are under bleacher in both extended and closed position... completely out of sight.

ceiving Station increases efficiency during high volume periods and gives improved centralized control by the operator. It can be easily added to the conventional Adamation Dishwashing System and requires no additional space. A completely automatic cycle starts with the Receiving Station and continues through the cleaning operation. **Adams Mfg. Co., Inc., 85 Myrtle St., Waltham, Mass.**

For more details circle #37 on mailing card.

Hydro-Vac "Air-Scoop" for High-Speed Floor Cleaning

Designed for fast pick-up of either wet or dry materials, the Hydro-Vac "Air-Scoop" cleans a 26-inch swath on each pass over the floor and enables an operator to clean up to 25,000 square feet per



hour. The new model is available as a complete vacuum unit, or it can be obtained as an attachment for standard 12 or 16 gallon Hydro-Vac wet-dry vacuum cleaners. A squeegee attachment for wet pick-up and bristle tool for dry pick-up are available. Advance Floor Machine Co., Spring Park, Minn.

For more details circle #38 on mailing card.

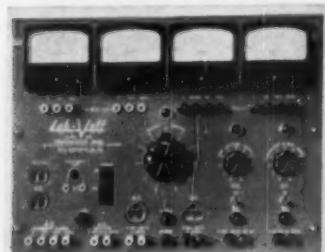
Boltaglas Fiberglass Trays Have High Abrasion Resistance

Constructed to withstand chipping, cracking, staining and warping, Boltaglas trays of fiberglass incorporate the rugged, resistant qualities of fiberglass products, including superior abrasion resistance. Lightweight, easy to handle and with a smooth surface that cleans easily and is impervious to stains from food acids, fruit juices and alcohol, the oblong trays withstand extreme temperatures and are available in three sizes. Bolta Products, Div. General Tire & Rubber Co., 70 Garden, Lawrence, Mass.

For more details circle #39 on mailing card.

Lab-Volt Powermaster Panel for Educational Electrical Work

The Lab-Volt Powermaster Panel, Model 204, is a comprehensive self-contained electrical power source for educational electrical work. It is available in panel form for standard rack mounting, or cabined for table or desk top use. The unit offers the following electrical



services: continuously variable AC and DC high and low voltage, DC transistor and bias supply, AC filament and rectifier sources, continuity testing source, duplex line voltage outlet, and complete AC and DC metering service. All circuits are protected by fuses accessible from panel front, and all receptacles are permanently identified with voltage and continuous duty amperage ratings. Each Model 204

supplies complete work-station service for two advanced students or complete demonstration facilities for secondary level science or industrial arts courses, and comes complete with all necessary mounting hardware and test leads. Buck Engineering Co., Inc., Freehold, N.J.

For more details circle #40 on mailing card.

Drawing Board and Drawer Cabinets In No. 1340 Drawing Table

Ample storage space for seven students is provided in the new No. 1340 Drawing Table. A drawing board cabinet with a book storage compartment and separators for storing seven boards is on one side and seven drawers with recessed handles are on the other. The new table

has a smooth steel top with a flange on the front to hold drawing boards in place, and is available as a complete unit, or



component parts may be ordered separately. Lyon Metal Products, Inc., 5 Plant Ave., Aurora, Ill.

For more details circle #41 on mailing card.

(Continued on page 176)

Both NEW and DIFFERENT SHELDON 15" PRECISION LATHES

NEW

New. Revolutionary double-box Headstock (Pat. Pend.)
New. "WORK-HOLDING ONLY" Spindle.
New. Single-Shift Back Gear Lever on Headstock.
New. Headstock and Apron running in oil.
New. 1 1/2" Hole through Spindle.
New. 60-pitch Gear Box with built-in Lead Screw Reverse.
New. Amazing LOW PRICE.

DIFFERENT

Different. Spindle rigidly held in two large "Zero Precision" tapered roller bearings arranged in box-type design.

Different. Electrical switches and push-button stations fully enclosed in built-in well in headstock.

Different. Two independent clutches in apron for selecting power feeds.

Different. Cam-action tailstock clamp for rapid release and instant locking of tailstock.

Different. Triple, caged, V-belt outboard drive—eliminates intermediate shafts—delivers more power to spindle.



This is an all new lathe that bridges the gap between conventional belt driven and geared head lathes. It combines the capacity and power of a geared head with the economy and flexibility of a belt driven lathe. Available with 5', 6' and 8' bed lengths providing 31", 42" and 66" center distances.

Send in Coupon for full information

SHELDON MACHINE CO., INC. 4266 N. Knox Ave., Chicago 41, U.S.A.

Gentlemen: Please send me information on items checked.

<input type="checkbox"/> The NEW and DIFFERENT SHELDON 15" Lathes	Name	Title
<input type="checkbox"/> Sheldon 10", 11", 13" Lathes	School Name	Company
<input type="checkbox"/> 11" and 13" Variable Speed Lathes	Street Address	Home
<input type="checkbox"/> High Speed Turret Lathes	City	State
<input type="checkbox"/> Sebastian 13" and 15" Geared Head Lathes		
<input type="checkbox"/> Horizontal Milling Machine		
<input type="checkbox"/> Sheldon 12" Shaper		
<input type="checkbox"/> Name of Local Dealer		
<input type="checkbox"/> Have Representative Call		

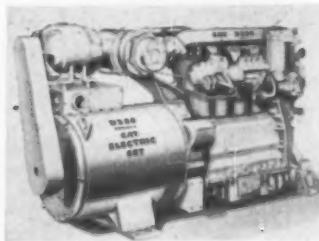
SHELDON MACHINE CO., INC.

**4266 N. Knox Avenue
Chicago 41, Illinois**

For additional information, use postcard facing back cover.

Three Compact Cat Diesels Offer More Power in Less Space

In addition to the necessity for emergency standby electric power, supplements to utility power are often required with the amount of electric equipment constantly being used. Caterpillar now of-



for adaptation to a wide range of applications. The four-cycle design of the new models provides advantages such as complete, efficient elimination of all exhaust gases through full exhaust strokes; a pre-combustion chamber fuel system for combustion of a wide variety of fuels without smoke and odor, and gear driven dual shaft reciprocating inertia balancers to eliminate the natural vibration. Caterpillar Tractor Co., Engine Div., Peoria, Ill.

For more details circle #42 on mailing card.

fers three ultra-compact but high capacity Diesel-electric sets designed to produce their kilowatts efficiently with minimum maintenance, and in minimum floor space. In addition, the new models have low-sound level exhaust and minimum vibration.

The result of thirty years of research and experience, the new models are turbocharged as standard equipment but each is available with an aftercooler as optional equipment to pull more horsepower from the same package. Model D320 Series A produces 50 KW in standard operation, D330 Series A produces 75 KW, and the large D333 Series A produces 125 KW. All engines give optimum performance at low maintenance cost and are designed to fit most general uses with accessories

Shannovue Visible Records Offer Instant Access

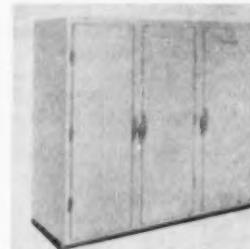
Sound and economical handling of records is offered with the Shannovue Visible Record system. Time is saved in locating records as well as in summarizing their content and recording information, and the simplicity and accuracy of the system minimize error. The records permit instant access to critical facts in an orderly manner. The system employs a variety of card types and sizes to meet every need, including flexible arrangements, stock printed forms and special prepared forms for adapting Shannovue exposed cards to specific needs. Pockets are made of heavy kraft paper slotted to hold the various sizes of cards and permit visibility of all cards, with easy insertion and removal. Title inserts fit in the clear plastic edge protector to speed identification. Various signals of colored metal or plastic are used on visible margins to indicate special facts or conditions and further speed the finding of desired information.

The files are held in Shannovue cabinets of heavy gauge steel, precision made for a lifetime of dependable, smooth action. A locking security door is standard equipment, as are tray rests to facilitate use and access to records. The H-O-N Co., Muscatine, Iowa.

For more details circle #43 on mailing card.

Compact Reach-In Refrigerators In Tyler's "Quality Line"

Available in one, two and three door models for self-contained or remote installation, the new "Quality Line" Reach-In Refrigerators and Storage Freezers feature fresh, clean, trimline styling, welded-steel construction, space-saving compactness and low operating and upkeep expenses. The units in the line are manufactured with all-metal interior door liners; exterior-mounted heavy-duty hardware; con-



veniently located thermostatically controlled temperature control; super-density insulation; efficient drainage system, and perforated base, and are offered in a choice of gleaming stainless steel or baked-on white enamel exteriors and interiors, as well as aluminum interiors. Tyler Refrigeration Corp., 1401 Lake, Niles, Mich.

For more details circle #44 on mailing card.

Oxygen Administration Set for Athletic and Other Emergencies

A portable oxygen administration set which can be kept on hand for athletic and other emergency use is offered in the Breath-O'-Life Emergency Oxygen Administration unit. Weighing under two pounds, the streamlined portable unit is a disposable sphere container holding oxygen sufficient for more than an hour of

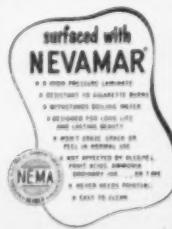
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End Maintenance Costs With Lifetime Nevamar Surfaces

National cabinets are precision-built for enduring service. Their Nevamar laminated plastic surfaces never need refinishing—eliminate this periodic cost from your budget. A complete range of models to meet every classroom need.

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NO. DS-8 PAPER STORAGE CABINET

NATIONAL SCHOOL FURNITURE COMPANY

DIV. OF NATIONAL STORE FIXTURE CO., INC. • O'DENTON, MARYLAND



administration. Manufactured from a new type of missile steel, the sphere is light in weight yet high in tensile strength. The heavy duty control valve reduces oxygen pressure to that approved at mask outlet and a simplified diffuser assures exacting distribution of the oxygen flow. The sphere cannot be opened with ordinary tools, providing an added safety factor. Breath-O'-Life Oxygen, Inc., The Arcade Bldg., Cleveland 14, Ohio.

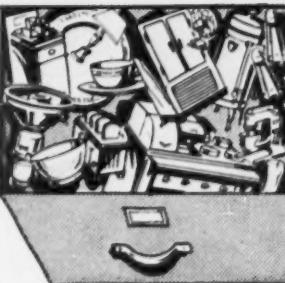
For more details circle #45 on mailing card.

(Continued on page 178)



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Everything You Need
... When You Need It!



Dealing with DON is like having at hand a huge drawer of supplies and equipment that never gets empty. Just tell a DON sales representative your requirements — drop us a requisition — or reach for your phone. Your order will be filled immediately.

50,000 Items of Equipment Furnishings • Supplies

Here at DON is a HUGE variety of just about everything required to operate your restaurant, hotel, motel, hospital, club, school, college, industrial cafeteria or institution. Be it for your kitchen, dining room, sleeping quarters, or building maintenance, here it is and one requisition will cover all your wants. On everything: "Satisfaction guaranteed or your money back."

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BOSTON®
PENCIL SHARPENERS

STEEL GEARS

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quality for economy

B

Engineered to meet today's high standards for schools... Rugged and durable... These Boston Sharpeners will give you more service for less maintenance than ever before.

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Write for information
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Rauland

SCHOOL SOUND SYSTEMS

RAULAND's engineering experience provides in these systems absolute simplicity of operation, but with the complete flexibility demanded by present day school administration. Exclusive features and moderate cost have made RAULAND Sound the choice of thousands of educators. RAULAND systems are still giving reliable service after two decades of use.

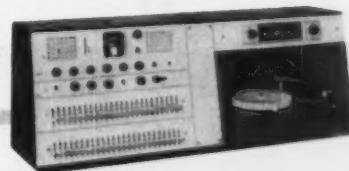


S800 Series
Three-Channel System; unusual program flexibility; capacity up to 221 rooms.

every desirable program facility and feature

- ★ **Microphones**—announcements and programs from multiple microphone locations
- ★ **Intercom**—two-way voice conversation with any room; privacy available
- ★ **Phonograph**—distributes phono program (transcription player or changer); also available for use with tape recorder
- ★ **FM-AM Radio**—selects any FM-AM radio program for distribution to any or all rooms
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Model S745
Two-Channel System;
Desk mounting—
compact and efficient



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An experienced RAULAND Engineering Distributor is available in every major city to survey your buildings and make practical recommendations. No obligation, of course. Send coupon or write today.

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Two Norris Manhattan Dispensers Feature Automatic Portion Control

A pushbutton, conveniently located on the front of two Norris commercial dispenser models, actuates an electric mech-



anism which dispenses exactly the correct amount of milk into a glass. Any desired amount of milk up to a full quart can be dispensed by manually setting a platform scale. Models available with the automatic portion control are the PC-15 Manhattan, the three five-gallon can size, and the PC-10 Manhattan, the two five-gallon can size. **Norris Dispensers, 2720 Lyndale Ave. S., Minneapolis 8, Minn.**

For more details circle #46 on mailing card.

Onan Magnecliter Generator Standard on 25KW Electric Plants

A new Magnecliter Generator with Static Exciter and Voltage Regulator, formerly available only on larger units, is installed as standard equipment on all Onan 25KW gasoline driven electric plants. Constructed of rugged coils and windings, the

Magnecliter eliminates hundred of electrical connections, requires no extra sensitive adjustments, is light weight and compact, and provides efficient performance in both primary and standby applications. **D. W. Onan & Sons Inc., 2515 University Ave. S.E., Minneapolis 14, Minn.**

For more details circle #47 on mailing card.

"Showcase" Food Vendor Holds 130 Food and Drink Items

A unique type of vending machine which holds 130 separate food and drink items is available in the Rowe All Purpose Merchandiser. Made in showcase de-



sign so that the customer can see and select what he wants, the machine accommodates a wide variety of cold foods and packaged drinks, including sandwiches, salads, pies, cold desserts, fresh fruits, milk, fruit juices, carbonated drinks and the like, each in an individual compartment. The coin-operated automatic vending machine permits vending at any four

prices, in any combination of coins between five and 50 cents. A complete light lunch can be selected from the refrigerated machine, which keeps the foods fresh and ready for service. Four vertical columns, with 13 separate sections in each, display the foods behind glass doors. The customer pushes a "transport" pushbutton which revolves the shelves on a chain belt until the desired item appears behind one of the 13 glass "delivery windows." The coins required for that item are then inserted and the sliding window opened for delivery of the selected food. An interlocking device permits the opening of only one window at a time. The machine is designed for installation with other automatic vendors in the "Rowebotera" line. **Rowe Mfg. Co., 31 E. 17th St., New York 3.**

For more details circle #48 on mailing card.

Trend Series Luminaires Designed for Visual Comfort

High-level illumination is provided at recommended standards for visual comfort with the new line of Trend Series fluorescent luminaires. Attractive, lumin-



ous wrap-around side panels and efficient diffusers are included in the design, resulting in higher foot-candle levels. A choice of three diffusers is offered with the Trend Series, and the luminaires are available in two, three and four-lamp units four feet in length, and a four-lamp eight-foot tandem arrangement. **Lighting Products, Inc., 2225 West Park, Highland Park, Ill.**

For more details circle #49 on mailing card.

Mardi Gras Tile Colors Go All the Way Through Material

Resilient, slip-resistant and easy to keep clean, Mardi Gras tile is made of Nyra-

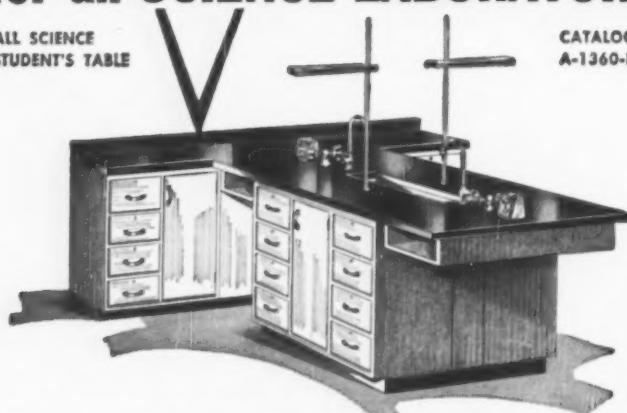


cord and designed to afford resistance to wear, scoring, denting and puncturing. Available in a choice of thicknesses and sizes, the tile is produced in five colors, which go all the way through the material so as not to show wear, with a "confetti" or stippled design. **American Mat Corp., 1719 Adams St., Toledo 2, Ohio.**

For more details circle #50 on mailing card.
(Continued on page 180)

Quality FURNITURE for all SCIENCE LABORATORIES

ALL SCIENCE STUDENT'S TABLE

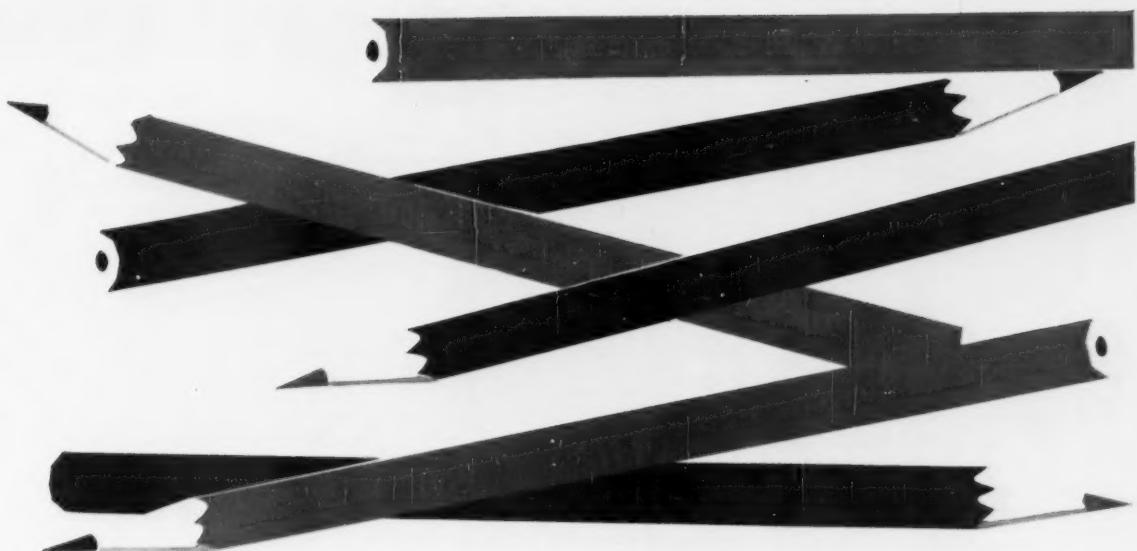


CATALOG NO.
A-1360-EC

These new perimeter type tables offer unlimited design possibilities and arrangements from standard interchangeable base units. They provide numerous advantages for new construction design as well as for use in remodeling for Chemistry, Physics, Biology and General Science laboratories. Our representative engineer will be pleased to discuss your requirements and show you the entire line of Peterson furniture that has been the choice of leading educators and industrial furniture users for more than 65 years.

Write Dept. 1226 for Brochure Number 12. It's Free.

LEONARD PETERSON & CO., INC.
1222 FULLERTON AVENUE, CHICAGO 14, ILLINOIS



Today's low-cost way to automate your grade reporting is with Keysort Data Processing

For objective grade reporting that's fast, simple, accurate—for non-conflict class scheduling, library activities and a variety of other vital school administrative problems—Keysort is the data processing system to use.

The reasons are many. No restrictive procedures; minimum training; remarkable economy; simplicity of installation and operation.

Keysort, in fact, is the only automated data processing system flexible enough to fit your school as it stands *and* as it grows. It is the one system adaptable and affordable to schools of every size.

With Keysort you use punched cards designed for rapid sorting. Writing is reduced to a minimum. Results are summarized direct by your present office staff—so

there's no need to turn teachers into clerks.

Result: Keysort automates your grade reporting, class scheduling and other complicated duties to give you the meaningful on-time information you need to help provide better education. Without lost teaching time. And at a cost well within your school's budget.

Your nearby Royal McBee Data Processing Systems Representative has had a wealth of experience in solving school scheduling and reporting problems. Working with you and your board, he can offer helpful advice about a low-cost Keysort system tailored to your individual requirements. Call him, or write us at Port Chester, N. Y.—and we will be happy to supply you with actual case histories from our files.

ROYAL MCBEE • *data processing division*
NEW CONCEPTS IN PRACTICAL OFFICE AUTOMATION

Model 94-23 GMH Extinguisher For Use on Class A and B Fires

Recommended for protection in various areas of the school building, Fyr-Fyter



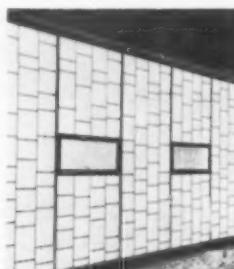
Model 94-23 GMH is a 2½-gallon portable pressurized water fire extinguisher. Featuring attractive, durable stainless steel construction, easy-to-operate "squeeze grip" handle, large visual pressure gauge protected by sturdy gauge guard, and molded hose, the unit provides maximum efficiency and is approved for use on Class A and B fires. **Fyr-Fyter Co., 221 Crane St., Dayton 1, Ohio.**

For more details circle #51 on mailing card.

Kalwall's Random-Grid Panel Permits Design Flexibility

An overall random effect is achieved with Random-Grid Panel, a design addition to the Kalwall line of plastic and aluminum translucent wall panels, by varying the distance between the mechanically interlocked aluminum I-beam ex-

trusions which form the core of the panel. High-tensile-strength fiberglass reinforced polyester sheets are permanently bonded to the core to form a lightweight, structurally strong panel. Used in wood, masonry and curtain wall construction, the panels are manufactured in sizes up to four by 20 feet, and require only perimeter fastening to the building because of their high structural strength. A wide variety of color faces is available, and



colored inserts may be used in the grid openings for flexibility of design. **Kalwall Corp., 43 Union St., Manchester, N.H.**

For more details circle #52 on mailing card.

Crest No. 77 Assortment Includes 77 Gold-Pak Stem Kits

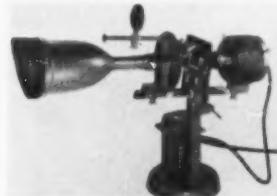
The maintenance engineer can have a complete stem department at his fingertips with the Crest No. 77 Faucet Stem Assortment, consisting of 77 Gold-Pak Stem Kits which apply to over 300 fixtures each boxed and labeled. Included

with the assortment are the Faucet Stem and Matching Seat "Eye-Dentification" chart and a new Faucet Guide. **Crest Mfg. Co., Inc., 4-65 Forty-Eighth Ave., Long Island City 1, N.Y.**

For more details circle #53 on mailing card.

Projection Microscope Has High Power Optical Attachment

Versatility and economy are combined in the Kern-Brites Projection Microscope. The low-cost instrument features simplicity of operation performed with effortless regularity and precision and resulting in projected images with unusual clarity and overall sharpness. Catalog No. K-20075 includes a high power optical attachment to the basic primary model with triple turret nose-piece, three objectives, iris diaphragm, coarse and fine focusing movement, mirror attachment, blue filter, daylight projection head and other features. The microscope contributes to teaching



efficiency and saves group time in the study or examination of microscopic materials due to their projection before the class. It can be used for projection to screen, for photo-micrography and other purposes, including its use in closed-circuit television teaching. The instrument is finished in blue and chrome. **Kern Laboratory Supply Co., 2611 Exposition Blvd., Los Angeles 18, Calif.**

For more details circle #54 on mailing card.

HOW TO WATCH WITHOUT BEING SEEN



From the classroom,
it's a mirror!



From the dark observation room,
it's a window...

Wherever it's important to observe students or classes without their knowledge, *Mirropane*®, the "see-thru" mirror, is the answer. If you want to see without being seen, call your L·O·F distributor or dealer (listed under "Glass" in the Yellow Pages) or write Dept. LM-48110.

MIRROPANE 
the "see-thru" mirror

LIBBEY·OWENS·FORD GLASS CO.
811 Madison Avenue, Toledo 1, Ohio

180 For additional information, use postcard facing back cover.

Heavy-Duty Steel Service Counters Feature Boltless Construction

Boltless construction resulting in ease of assembly is a feature of the T-line heavy-duty steel service counters. Manu-



factured of standard Penco components, including posts, shelves, counter fronts and partitions, the new unit's basic element is a two-part channel clip which provides a firm support for shelf edges. T-line service counters are available in a wide range of sizes, in green, gray and six optional colors, and in open or closed styles with or without doors. Reinforcements or accessory parts such as dividers and drawers can be added to the unit, and any number of sections can be joined together to form a long, continuous counter. **Penco Div., Alan Wood Steel Co., 200 Brower Ave., Oaks, Pa.**

For more details circle #55 on mailing card.

(Continued on page 182)

The NATION'S SCHOOLS

Getting the most out of each waxing?



He's mad—has to wax again



He's glad—dry-cleans with Brillo Floor Pads

... dry-clean the shine back into your floors

Fresh wax forms a transparent film to protect your floors from wear. Regular once-overs with a Brillo Steel Wool Floor Pad removes the dirt and re-hardens the wax . . . makes each waxing last twice as long.

You save extra work because this regular "dry cleaning" with Brillo eliminates the extra scrubbing and waxing

that is needed when you strip too often.

There's a Brillo Solid Disc Steel Wool Floor Pad for every job . . . scrubbing, dry-cleaning or buffing. Send for free instructive folder today.

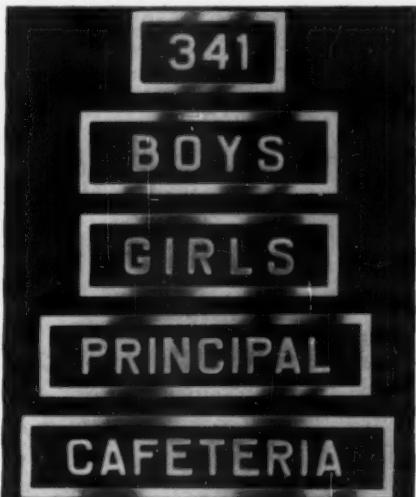
To strip floors completely
Use BRILLO Syndic®
REVERSIBLE FLOOR PADS

BRILLO®
SOLID-DISC
STEEL WOOL
FLOOR PADS

BRILLO MFG. CO., INC., BROOKLYN 1, N. Y.

BRILLO FLOOR PADS—The Safe Way to Beautiful Floors

Raised Letter ALUMILITED ALUMINUM SIGNS AND DOOR NUMBERS



Our Low Prices Will Surprise You!
Ask For Our Style No. 870 "Enduro" SIGNS

SPENCER INDUSTRIES
1508 N. MASCHER ST. PHILADELPHIA 22, PA.

1908-1961, 53 Years of
Monroe Leadership



FOLDING CHAIRS
All—steel, also plywood or padded seat.
Complete line. Direct
prices, discounts. See
Catalog.

TABLE and
CHAIR TRUCKS
The leader,
7 models,
sizes — for
transporting, storing. Smooth
rolling, easy loading. See Catalog.

Monroe
CATALOG
in COLORS

Monroe
FOLD-KING
TABLE LINE

UP TO 40% DISCOUNT TO CHURCHES & INSTITUTIONS

Kitchen committees, social groups, attention! Direct-from-factory prices—discounts up to 40%—terms. Churches, Schools, Clubs, Lodges and all organizations. Our new MONROE 1961 FOLD-KING FOLDING BANQUET TABLES are unmatched for quality, durability, convenience and handsome appearance.

NEW—Completely automatic lock on pedestals and legs. "Snoops" them rigidly in place, or folded flat. New pedestal and frame construction.

Mail coupon, write, wire or phone for our beautiful new catalog with color pictures of Folding Tables, Folding Chairs, Table and Chair Trucks, Portable Partitions, Bulletin Boards, Folding Rriers and Platforms.

MAIL THIS SPECIAL COUPON TODAY!

Please send the new 1961 Monroe FOLD-KING Catalog—prices, discounts, terms.

Name of church, organization

Mail to _____ Title _____

Address _____

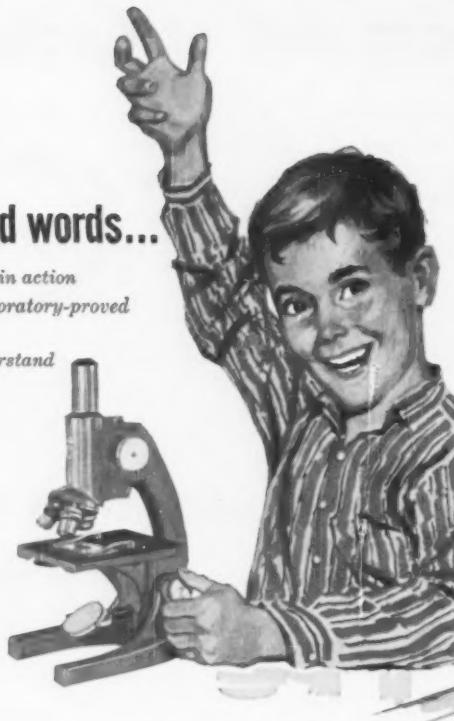
City _____ Zone _____ State _____

We are interested in (Tables, Chairs, etc.)

THE MONROE COMPANY 76 Church St. COLFAX, IOWA

worth a thousand words...

Let your students see science in action for themselves with these laboratory-proved educational instruments by Bausch & Lomb. They'll understand better, faster—be eager to learn more.



B&L STANDARD TEACHING* MICROSCOPES. Standard size and operation; sturdy, precision construction at school budget prices. **B&L STEREOZOOM* MICROSCOPES** with continuously variable or fixed magnification. Colorful, erect 3-D images give new life to any subject. **B&L MACROSCOPES*** are ideal for gross studies, field trips, dissection. Easy focus, large field of view with 10 \times , 20 \times , or 40 \times magnification. **TRI-SIMPLEX* MICRO-PROJECTOR** prepares students for individual microscope study. Projects slides or live specimens to wall screens or to tabletop for tracing. **BALOPTICON* PROJECTORS** give big, bright, lasting views of slides, opaque objects, even chemical reactions. **B&L SPECTROSCOPES.** Basic chemical analysis tools; show spectra of elements. **STUDENT-PROOF** construction of all instruments gives years of service at a cost to fit any school budget. **WRITE** for Catalog E-152; demonstration on request. No obligation, of course. Bausch & Lomb Incorporated, 68911 Bausch Street, Rochester 2, New York.

*Trademark, Bausch & Lomb Incorporated



Model No. 303 Folding Chair Features "Swing Away" Tablet Arm

The Model No. 303 is a practical folding tablet arm chair for classrooms and lecture groups, and features an arm of solid $\frac{3}{8}$ inch birch grained plastic, contour-shaped to permit comfortable entry and exit when it is in the up position. Automatically "safe-locked" into place



with a simple upward motion of the hand, the arm swings easily out of the way when not in use and folds down flat at the side of the chair. Constructed of sturdy tubular steel with heavy duty braces and hinges, the "Swing Away" tablet arm chair folds flat for easy storage and is available in four attractive colors. **Hampden Specialty Products Corp., Easthampton, Mass.**

For more details circle #56 on mailing card.

Drywall Partition Systems Added to U.S. Gypsum Line

Four new drywall partition systems are announced by United States Gypsum Company. Developed for use in institutions and other commercial buildings, each uses Sheetrock gypsum wallboard as a major component but differs in design and application. The new systems include Two-inch Solid Partition, Double-Solid Partition, Metal Stud Partition and Ceiling and Wall Furring Systems, providing versatility and covering most needs. **United States Gypsum Co., 300 W. Adams St., Chicago 6.**

For more details circle #57 on mailing card.

Decorated Plastic Dinnerware Has Pattern From Holland

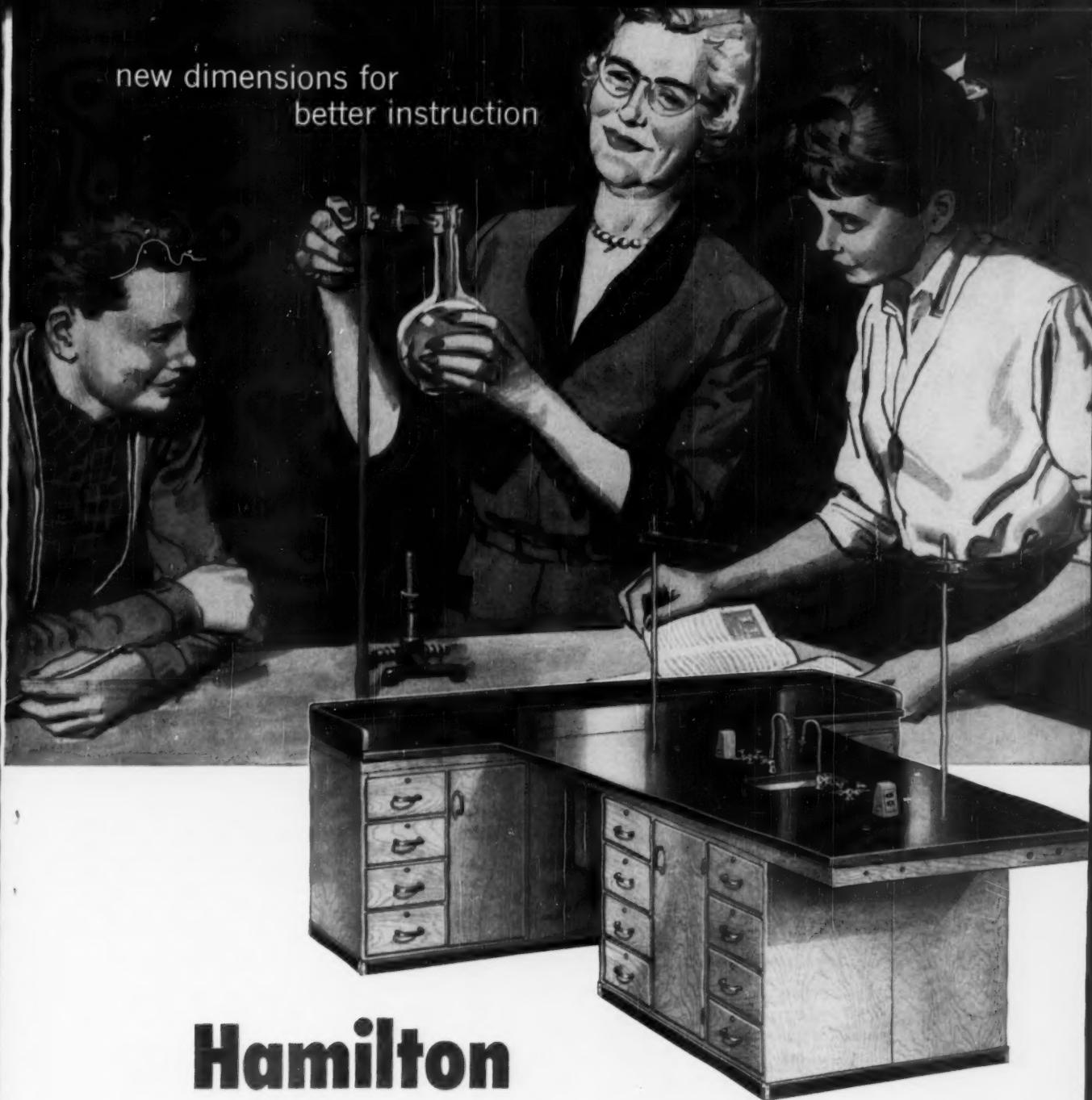
A fruit and leaf design adapted from a popular dinnerware design used in Holland is the newest pattern in Regal Decorated plastic. Pattern #303 is colorful and



attractive and is molded into the plastic so that it cannot fade or wear off. This brings to nine the number of patterns in Regal Decorated dinnerware, which has a vented-contour base to ensure complete drainage and fast drying. **Plastics Mfg. Co., 2700 S. Westmoreland, Dallas 33, Texas.**

For more details circle #58 on mailing card.
(Continued on page 184)

new dimensions for
better instruction



Hamilton

activity-centered student tables

Your science laboratory equipment is "permanent" — but must grow with your teaching program. It must fit — functionally — your teaching methods and procedures, and be able to absorb increased enrollment loads, by virtue of its arrangement potential and planning.

Possibly no unit of school furniture is subjected to as much rigorous wear as laboratory furniture, so it must be *structurally* sound.

Hamilton units are built for school use. They're constructed of selected northern hardwoods, with extra-

heavy mortise and tenon-type joints — delivering the most and best of what it takes to stand up in use.

And *all* construction, of *all* units — must be of consistent quality.

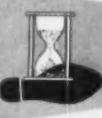
Hamilton gives you expert help in selecting from an infinite variety of laboratory arrangements, through the Hamilton unit system.

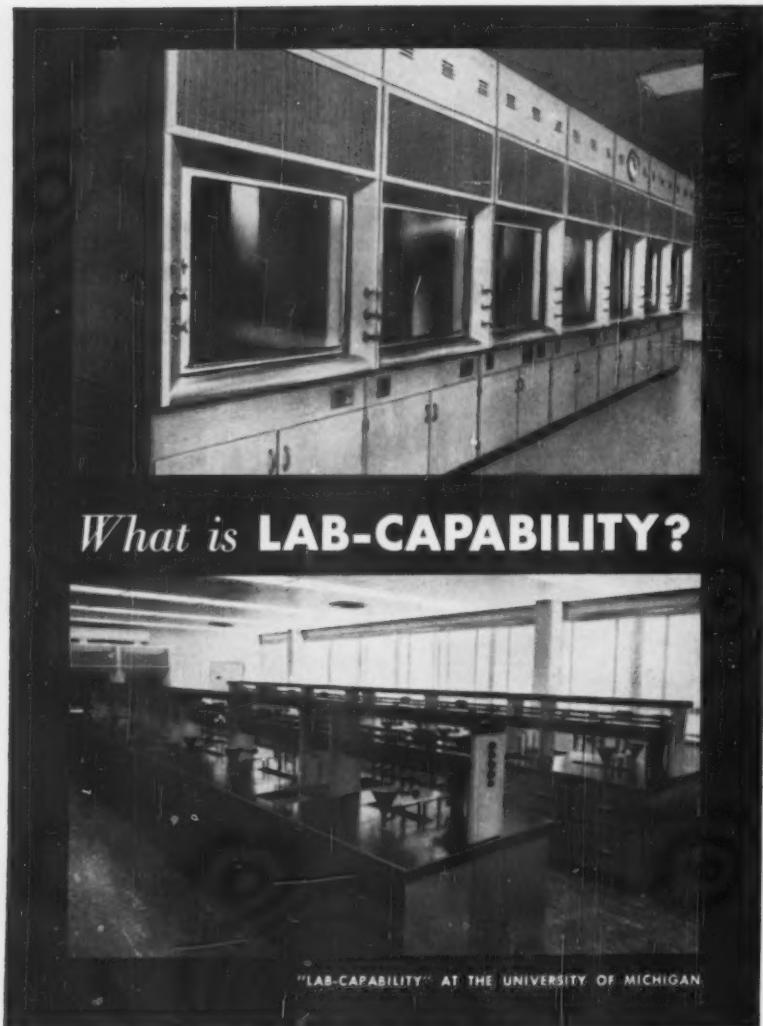
Plan with Hamilton — and your laboratory facilities will be more practical, deliver more value for the greatest number of years.

Hamilton
PROFESSIONAL AND SCIENTIFIC FURNITURE

Hamilton Manufacturing Company, Two Rivers, Wisconsin

new dimensions in time and
space efficiency for: physicians;
dentists; industrial, hospital, school
laboratories; draftsmen; printers;
libraries; home laundries.





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"LAB-CAPABILITY" AT THE UNIVERSITY OF MICHIGAN

LAB-Capability begins with layout...precision design equipment...experienced engineering...and a carefully supervised installation.

LAB-Capability provides convenience and flexibility for instructor and student alike. It fosters effective teaching, learning and retention. It permits scheduling a maximum number of students per unit of floor space. It helps to insure the safety of both people and equipment.

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METALAB *Equipment Company*

A SUBSIDIARY OF CRESCENT PETROLEUM CORPORATION

256 DUFFY AVENUE, HICKSVILLE, L. I., NEW YORK

Aero-Liner Plastic Mesh Protects and Dries Glassware

Resilient plastic mesh which permits air circulation and protects against breakage and noise is available in fifty foot rolls for use in dish washing and handling areas. Known as Aero-Liner, the mesh assures quick air-drying of glassware and china and protects surfaces against scratch-



ing. It can be cleaned with steam, and is easily cut to fit shelf areas. **Rubbermaid Incorporated, Wooster, Ohio.**

For more details circle #59 on mailing card.

Gregg Shorthand Lessons Recorded on Endless Tape

Shorthand practice lessons which facilitate teaching and save the instructor's time are available from Cousino electronics. The endless magnetic tape developed by Cousino, which operates in a coiled loop and replays without rewinding, permits the student to repeat lessons as often as necessary without supervision. Authorization to record and distribute the dictation practice tapes for Gregg Shorthand was given by the Gregg Publishing Division of McGraw-Hill Book Company, and 120 different half-hour cartridges will make up the course. Recordings are offered in a special, self-threading cartridge marketed under the trade name, Echo-Matic. The cartridge provides tamperproof protection for the tape and requires no special training for use since student or instructor merely plugs in the Echo-Matic cartridge. Each cartridge will cover a half-hour lesson and is always ready for use since rewinding is not required. **Cousino Electronics Corp., 2107 Ashland Ave., Toledo 1, Ohio.**

For more details circle #60 on mailing card.

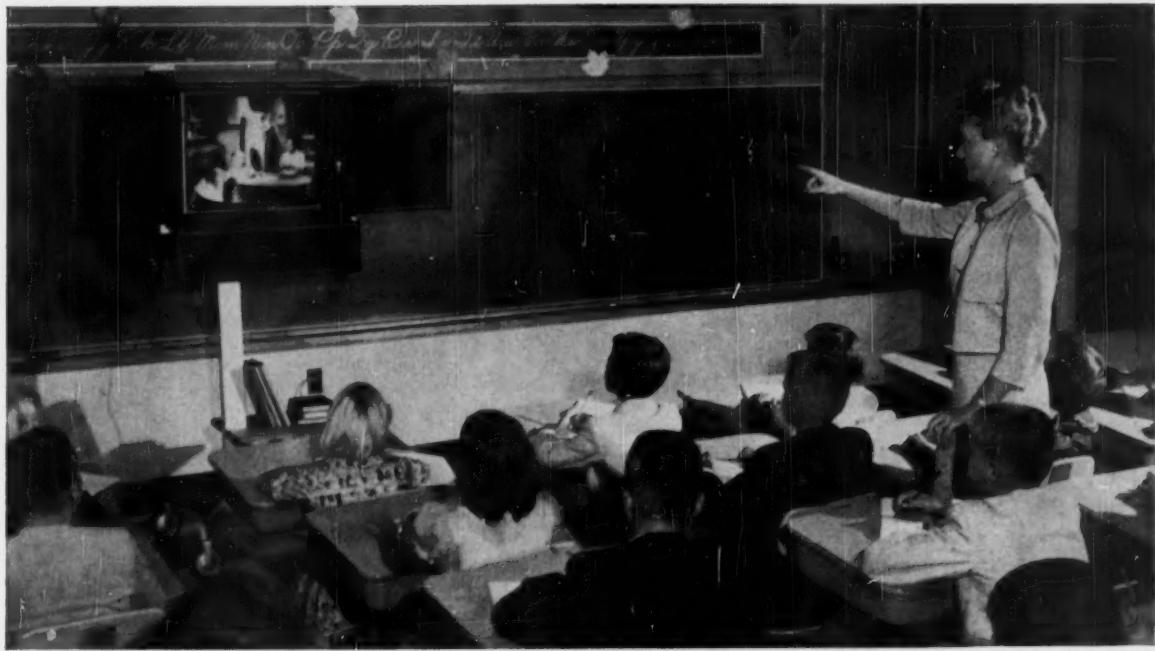
Royal Scot Photocopy Equipment Makes 1000 Copies With One Negative



Originals up to 12 inches in width and length are reproduced by the Royal Scot, an economical new photocopying machine that costs approximately five cents per print and makes up to 1000 perfect copies from one negative, according to report. The unit can process two types of prints. **Hunter Photo Copiest, Inc., 566 Spencer St., Syracuse 4, N.Y.**

For more details circle #61 on mailing card.

(Continued on page 186)



Big 262 sq. in. screen (21" overall diagonal) lets everyone see picture.

Only RCA VICTOR offers TV with so many features specially designed for classroom use



Front Tuning for easy, convenient operation



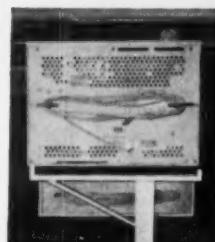
Set tilts easily to permit square-on viewing from any angle



Removable auxiliary speaker can be placed anywhere in the room

RCA Victor's LYCEUM is specially engineered to meet the most rigid requirements for educational TV. It can be used for Regular or Closed Circuit telecasts, can be moved easily on the optional 5-foot, heavy-duty mobile stand, and can be securely locked when not in use. It has two 8" RCA Duo-Cone Speakers, with an optional third speaker for movement anywhere in the room.

For information on the finest educational TV, send the coupon today.



Tamper-proof back prevents unauthorized handling of set



Swing-out speakers fold in, make a compact unit you can lock



Easily moved. Set can be wheeled into any room for immediate use.

RCA Sales Corporation, Box 1226—A28, Philadelphia 5, Pa.
Please send me further information on RCA Victor Lyceum Educational TV Model 210-ET-750.

Name _____ School _____

Address _____

City _____ Zone _____ State _____

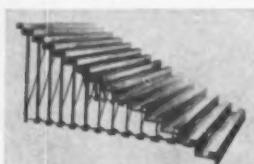


The Most Trusted Name in Television
RADIO CORPORATION OF AMERICA

Safety and Low Maintenance

With Hussey Open Deck Gym Seats

A new Open Deck type of Roll-Out gym seat meets the demand for retractable



spectator seating with a low initial cost and low maintenance. Constructed of hard Arkansas Pine with a high resistance to splintering, denting and scuffing, the telescopic retractable seats have a minimum of moving parts and a steel frame-

work designed for rigidity and structural safety. Standard sections are 16 feet long and from three to 15 rows high, and any desired number of rows may be extended and locked in place. Hussey Mfg. Co., Inc., North Berwick, Me.

For more details circle #62 on mailing card.

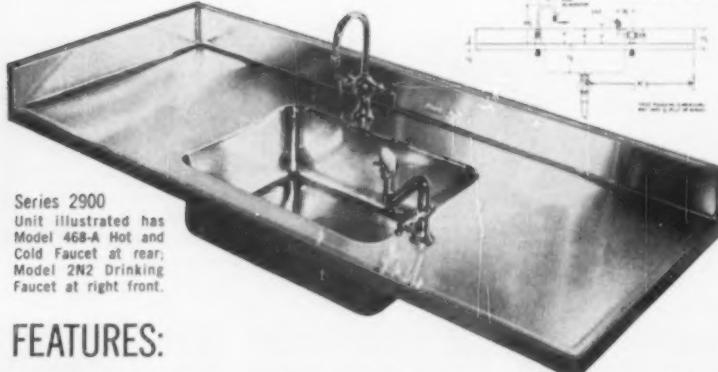
of asphalt and quarry, composition, vinyl, cork, marble or clay tile, the finish is available in one-gallon cans or five, 15, 30 and 55-gallon drums. Davies-Young Soap Co., 703 Albany, Dayton 1, Ohio.

For more details circle #63 on mailing card.

Buckeye Terrazzo Seal and Finish Lengthens the Life of Floors

A high-gloss, quick drying product for maintaining terrazzo floors, Buckeye Terrazzo Seal and Finish is nonskid, odorless and will not discolor. The product dries to a high gloss without the need of buffing and lengthens the life of terrazzo floors by sealing the pores against dirt and grime. Also recommended for floors

HAWS ONE-PIECE, STAINLESS STEEL DECK TOP & RECEPTOR UNIT



Series 2900
Unit illustrated has
Model 468-A Hot and
Cold Faucet at rear;
Model 2N2 Drinking
Faucet at right front.

FEATURES:

Invisible joints, no dirt-catching lap joints or solder seams, raised and rolled pre-formed edges, 4-inch backsplash, choice of right or left endsplash, sloping decks, heat resistant underseal, choice of Haws faucet fixtures, vandal proof fixture locking, chrome plated trim, famous Haws quality!

Write for FREE, fully-illustrated 1961 HAWS CATALOG, and
Model 2900 Specification Sheet.

HAWS DECK TYPE FOUNTAINS

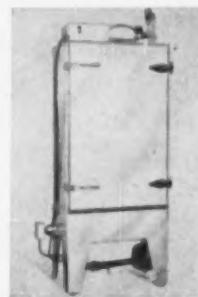
Manufactured by HAWS DRINKING FAUCET COMPANY

1441 FOURTH STREET BERKELEY 10, CALIFORNIA

EXPORT DEPARTMENT: 19 Columbus Avenue, San Francisco 11, California, U.S.A.

Refuse and Waste Cans Sanitized in Three Minutes

Only three minutes are required to wash, rinse and sanitize refuse and waste cans up to 22 inches in diameter and 30 inches high in the new Model Dean-R automatic can washer. The cabinet-type washer revolves the can as it is sprayed



on the inside and outside with hot water and detergent. An automatic control device stops the operation immediately should the washer door be opened before the cleaning cycle is completed. The washer has smooth vibrationless action, eliminating the necessity of bolting it to the floor. Washburn & Granger, Inc., 85 Fifth Ave., Paterson, 4, N.J.

For more details circle #64 on mailing card.

Mobilpage Sound System Needs No Electrical Outlet

Six standard flashlight batteries will yield 300 to 500 hours of service with the "battery miser" circuit, a feature of the Mobilpage 660, a compact, light-weight sound system. The battery powered unit can be set up in less than 30 seconds, requires no connection to an electrical outlet, yet meets nearly all requirements for indoor public address systems. The



8½-pound two-tone carrying case has a separate compartment for the complete microphone assembly with extra space for spare batteries and printed matter, and when opened the top forms a lectern support. Although a specially designed Midwest microphone assembly is recommended for best results, any low or high impedance dynamic or controlled microphone will work with the 660. Midwest Audio Corp., 3800 W. North Ave., Chicago 47.

For more details circle #65 on mailing card.

(Continued on page 188)

Rubbermaid Plastic Containers for

newest sanitary
and maintenance
methods . . .



6, 10 and 20 gallon sizes—\$4.98, \$6.98, \$9.98

Engineered to meet the most rugged
temperature extremes, from sub-zero
weather to steam cleaning. Lightweight for
easy handling with unbreakable, dent-proof
construction that never makes a noise.
Snap lock lid stays up, lifts off, snaps shut.



Rubbermaid
MEANS BETTER MADE

COMMERCIAL DIVISION • RUBBERMAID INC., WOOSTER, OHIO • COOKSVILLE, ONTARIO

CONTACT YOUR EQUIPMENT DEALER

**Student PROOF
yet
Instantly Adjustable!**

PERFECT POSTURE—INSTANTLY!

• Standard
School
Colors

• Instantly
Adjustable

• Tubular
Design

• Sturdy
Steel
Seats

No. 117

Now, lab and shop seating problems are solved with this 13 inch steel, non-swivel seat with electrically welded, tubular steel frame for rugged service. Our patented, automatic adjusting unit, adjustable from 17 to 25 inches without moving off the stool. Complete with rubber cushioned, chrome glides in grey, green or brown (other colors on order). Write today for full information and quantity discount structure.

**The one
Dependable Guarantee...
FOREVER!**

DEPENDABLE MANUFACTURING CO.
2407 FORT LUDLOW ROAD, BELLEVUE, NEBRASKA

Bally walk-ins
Aluminum or steel sectional construction

coolers
freezers
or Combinations

COMPLETE REFRIGERATION
SYSTEM ON 14" x 46"
PANEL AVAILABLE
FOR MANY SIZES

- Hermetically sealed
- Ready to operate

Sanitary! Strong! Efficient! You can assemble any size cooler, freezer or combination in any shape from standard sections. Add sections to increase size as your requirements grow. Easy to disassemble for relocation.

Bally Case and Cooler, Inc., Bally, Pa.
Get details—write Dept. NS-11 for FREE book.

**Unit Ventilators
Now in Webster Line**

Warren Webster and Company announces its entry into the unit ventilator



field with a new line designed especially for school installation. This complements the Webster System for Schools which has been an accepted heating system for

over fifty years. The new line is offered in a range of five sizes from 500 cfm to 1600 cfm standard air to satisfy demands of modern school construction. The unit ventilator is engineered to be used with the Webster "Tru-Perimeter" Walvector, and is integrated into companion line of functionally styled storage cabinets. Warren Webster & Co., Inc., 17th & Federal Sts., Camden 5, N.J.

For more details circle #66 on mailing card.

**Universal Fire Extinguisher
Puts Out All Standard Fires**

For use against the four standard classes of fires, the "ABC AllClass" eliminates the need for installing a variety of restricted-use extinguishers in fire hazard areas and

the danger of using the wrong kind of equipment at a fire. Operation of the new unit is like that of any standard extinguisher and requires no training program. Effective against paper and wood substance, burning liquid, live electrical and combustible metal fires, the product is available in three models, each of which uses the newly developed Alim ABC All-Class Powder, the key to the universality of the extinguisher. Alim Corp., 11 Park Pl., New York 7.

For more details circle #67 on mailing card.

**"Tonecrete" Decorative Coating
Is Fire Resistant and Durable**



Highly fire-resistant, "Tonecrete" is an inorganic coating which does not suffer from the deteriorating effects of oxidation and weather exposure. It is durable and decorative and forms a continuous, unbroken film over any number of base surfaces. It is designed for both interior and exterior surfaces and may be applied over all types of bricks and blocks, stucco, plaster, cement plaster, unglazed tile and dry wall, as well as asbestos composition boards, foamed glass, corkboard, paint-primed wood and previously painted surfaces. It can also be applied effectively on pre-fabricated steel buildings, metal roof decking and siding. It is available in a wide range of colors and textures. Desco Vitro-Glaze Assn. of America, Inc., Box 74, Buffalo, N.Y.

For more details circle #68 on mailing card.

**Environmental Test Rooms
Feature Plenum Chamber Construction**

Suited for the preservation and storage of samples, for various tests and many other applications, the new Labline line of walk-in environmental test rooms have two temperature ranges, ambient to 140

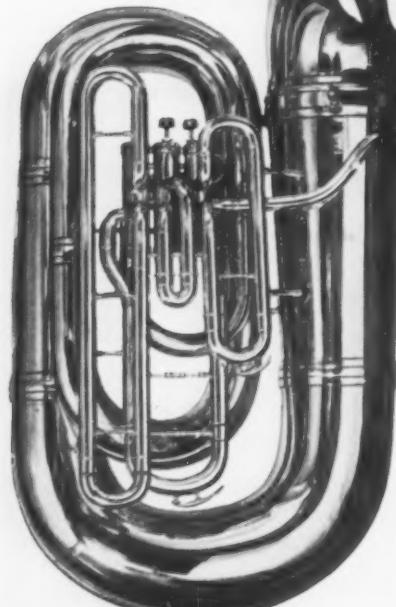


degrees and zero to 140 degrees F. Featuring plenum chamber construction which eliminates all interior ducts and louvers, the units are manufactured of heavy gauge aluminum inside with corrugated floor plates, have fully enclosed heating elements and come in a number of stock sizes. The room may be set in a corner or hallway and is easily moved. Labline, Inc., 3070 W. Grand Ave., Chicago 22.

For more details circle #69 on mailing card.

(Continued on page 190)

HOW MANY TOOTS in a TUBA?



And, how far is "up"?

One thing we do know—if the tuba is made by Conn, your school can expect many years of fine toots with a minimum of maintenance and expense.

Conn has been the acknowledged leader in instrumental school music since its beginning in the early 1920's...backed by more than 85 years of experience.

All the information we have garnered over the years is yours for the asking. May we be of assistance?

EDUCATIONAL AIDS CATALOG—Wall charts, film strips, music folios, inventory and depreciation records, student performance files, care of instruments instructions, fingering charts, technical manuals on instruments and acoustics, aptitude tests, pre-band instruments and teaching aids, rhythm band instruments.

INSTRUMENTAL CATALOG—Complete selection of brass and woodwind instruments, cases and electronic teaching devices.

HOW TO ORGANIZE A BAND—Complete information on how to get started, costs involved and free personal help by an experienced Conn representative.



**SEND FOR
FREE
INFORMATION!**

CONN CORPORATION, Dept. K-3011 Elkhart, Indiana

Please send without charge materials checked:

Educational Aids Catalog Instrumental Catalog
 How to Organize a Band

name _____

school _____

address _____

city, state _____



**Light-colored floor? Vinyl problem? Anti-slip requirement?
Super Flor-Treat is your answer**



For a beautiful anti-slip floor finish that contains no wax, MULTI-CLEAN all-resin *Super Flor-Treat* is unexcelled.

It may be used on asphalt, rubber, or vinyl tile, linoleum, terrazzo, wood, or concrete, and is a real problem-solver in these situations:

For Light-Colored Floors. Water-white *Super Flor-Treat* dries to a light-colored finish that won't yellow the lightest of floors (even white ones)!

When Insurance Regulations prohibit use of wax, *Super Flor-Treat* gives an easy-to-clean, self-polishing, glossy finish that will match the best waxes in every respect including scuff-resistance, buffability, and ease of removing. It is listed by U/L as an anti-slip material.

On Vinyl Tile, and other floors to which wax will not adhere satisfactorily, *Super Flor-Treat* may be applied without crawling or puddling. On such floors it

is often used as a base for wax.

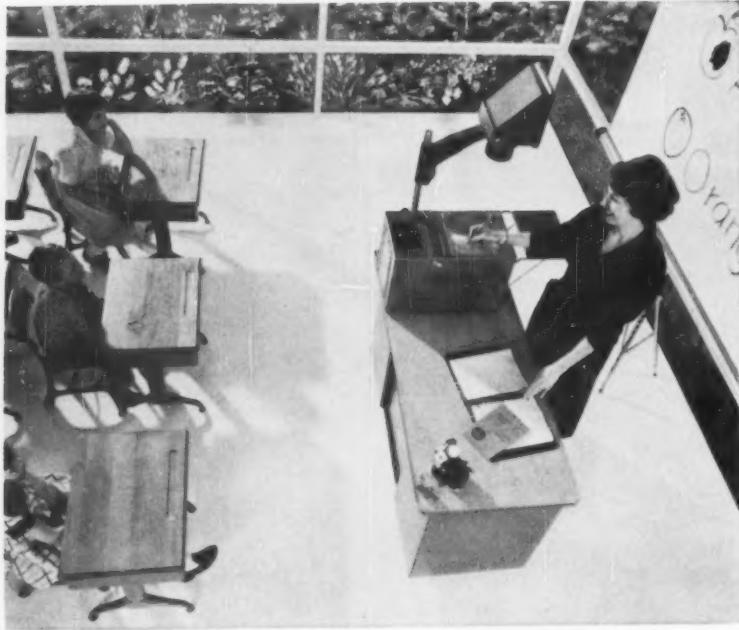
Faint But Pleasing Aroma makes it more pleasant to apply than sealers with objectionable odors.

Used as a base, *Super Flor-Treat* tends to restore color and brilliance to old, faded tile. Wax lasts longer when *Super Flor-Treat* is used as a base. Or, used alone, it gives a handsome, durable, highly water-resistant finish of which you can be proud.

Super Flor-Treat is just one of 27 modern cleaners, sealers, and finishes developed by MULTI-CLEAN Research. For more information on these materials and the scientific MULTI-CLEAN METHOD for maintaining your floors, call your local MULTI-CLEAN Distributor or write to Multi-Clean Products, Inc., Dept. NS-69-110, St. Paul 16, Minnesota.



Even in classrooms sunshine bright...



AO's NEW OVERHEAD DELINEASCOPE

gives the clearest image you've ever seen!

This revolutionary new overhead projector, by American Optical Company, was developed around a powerful 1000 watt light source to give you the brightest . . . biggest projected screen image you've ever seen. Even the extreme corners are sharp and clear because a specially designed Fresnel lens affords perfectly balanced illumination to every square inch of screen area.

This precision teaching instrument will project all the line, form and color of a 10" x 10" transparency up to a huge 177 sq. ft. screen image . . . in crisp, accurate detail.

You'll enjoy using this instrument because you face your class at all times . . . observe every movement and expression of subject reception and understanding.

AO's Overhead Delineascope helps give your program an unlimited flexibility that is not possible with any other AV medium. You can emphasize or dramatize by adding to your prepared teaching material on-the-spot.

You'll want to see all the new, exclusive features that make this instrument a practical investment in creative teaching. Your AO Salesman or Audio-Visual Dealer will be happy to arrange a demonstration at your convenience.



**American Optical
Company**

INSTRUMENT DIVISION, BUFFALO 13, NEW YORK

IN CANADA write—American Optical Company Canada Ltd., Box 40, Terminal A, Toronto, Ontario

Dept. M35
Please send complete information on AO's New
Overhead Delineascope.

Name _____

Address _____

City _____ Zone _____ State _____

Mechanized Upholstery System Now Used for Simmons Furniture

A new mechanized upholstery system known as U. S. Raval, developed by United States Rubber, is now used by Simmons Company in upholstering furniture. The F785 side chair illustrated is upholstered in the Kenya pattern of Naugahyde, and the system permits the appli-



cation of the stripe in an absolutely straight, horizontal line. The new system makes possible the shaping or forming of cushioning by mechanical means, including both contoured and tufted surfaces that can be concave and convex. New designs are also possible with the system. **Simmons Company, Merchandise Mart, Chicago 54.**

For more details circle #70 on mailing card.

"V" Rib Mat Design Scrapes Shoes Clean

Heavy duty blades which flex just enough to scrape dirt and grime off shoes are featured in the Shad-O-Rug and Cross-Rib mat runner. With the patented "V" rib design, soil falls between the ribs for later cleaning. The mats are effective for use in entrances, corridors and other areas to protect floors and carpeting, and also provide an effective anti-slip surface. Runners are available in red, green, tan, black, white and gray. **Wear Proof Mat Co., 2156 Fulton St., Chicago 12.**

For more details circle #71 on mailing card.

Free Standing Garbage Disposers With Easy-to-Use Adapter Kit

An easy-to-use adapter kit, including a sturdy, three-legged stand, 18-inch bowl sink and manual three-pole starter switch,



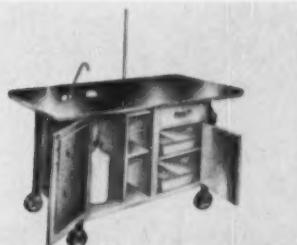
makes possible the availability of Waste King Universal garbage disposers as free-standing units. With the kit, a free-standing unit may be set up anywhere and later installed in a regular sink, if desired. The problems of complex installation and costly sink and sheet metal work are eliminated, and the free-standing models require less than five square feet of floor space. **Waste King Corp., 3300 E. 50th St., Los Angeles 58, Calif.**

For more details circle #72 on mailing card.

Cartalab Mobile Desk

For Science Demonstrations

Loss of valuable classroom time is avoided with the new Cartalab, a mobile instruction center that permits the advance preparation of special experiments and enables teachers to carry on science demonstrations whenever and wherever study areas are available. The unit contains a



stainless steel sink with pump faucet, retractable electric cord with multiple outlets, ample drawer and cabinet storage space, two plastic tote trays, a burette rod and an acid resistant top, and its frame and body are built of heavy gauge bonderized steel. Metalab Equipment Co., 270 Duffy Ave., Hicksville, N.Y.

For more details circle #73 on mailing card.

Medsan Germicidal Detergent Cleans and Disinfects

Practical for routine floor maintenance, mopping, hard scrubbing or machine cleaning, Medsan germicidal detergent is effective against both gram positive and negative bacteria. It has a high phenol coefficient and a dilution of one-half ounce per gallon of water makes an active disinfectant. It is also effective in general laundry operations to disinfect linens and blankets and it imparts continued resistance to bacteria when used in the last rinse. Finnell System, Inc., 1400 East St., Elkhart, Ind.

For more details circle #74 on mailing card.

Portable Basketball Standard Has Rubber Mounted Base

For use in and out of doors, the new Jayfro Portable Official Basketball Stand-



ard features a fan-shaped fiberglass backboard and steel chain net. Available in four models in single or double units, the standard can be purchased with permanent or adjustable heights, and is made of heavy duty aluminum with a cast iron rubber mounted base to protect gymnasium floors. Jayfro Athletic Supply Co., P.O. Box 1065, New London, Conn.

For more details circle #75 on mailing card.

(Continued on page 192)



how you can get complete floor maintenance at lowest cost

The quicker you adopt the Super method and provide Super equipment to do the whole job of floor maintenance, the more you will save. Here's how—

YOU NEED—

- A Super Service® Scrubbing Machine.
- A Super Suction® Cleaner with a Super Squeezee 30 attachment.

YOU DO—

- Scrub the floor.
- Pick up all the dirty solution.

The Squeezee 30 with its suction Squeezee makes a big 30" clean dry path on the floor. No mops, no waiting for the floor to dry. This saves hours of labor, keeps floors looking their best.



DOUBLE UTILITY—

The Super Suction Cleaner is also available at all times for any other wet or dry suction cleaning of carpets, walls, furnishings, etc.

The Squeezee 30 makes quick work of clean-up after plumbing failure or other flood conditions.

There is a Super Floor Scrubbing Machine to fit your capacity requirement. The newest is the Super Series SS which features compact design at low cost.

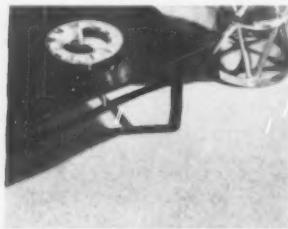
Your local Super distributor will gladly and promptly serve you. Write for catalog and complete data.
THE NATIONAL SUPER SERVICE COMPANY 1956 N. 13th St., Toledo 2, Ohio

"Once Over Does It"

SUPER SUCTION® SERVICE®
Power Suction Cleaners • Quality Floor Machines
SINCE 1911
"THE DRAFT HORSE OF POWER CLEANING MACHINES"

Durable Vinyl Carpet Has Soft Pile

Designed for use outdoors and indoors, on, above or below grade, and for installation directly on most types of flooring, the new U. S. Royal Vinyl Carpet has a luxurious pile that bridges the gap between hard and soft floor covering. The carpet is weatherproof, mildewproof,



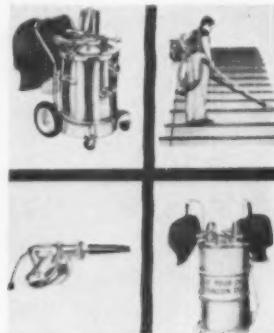
markproof and fire resistant, does not water spot, and is impervious to dampness, mold, moths and vermin. It can be washed with detergent, soap and water or vacuum cleaned and is made in eight sunfast colors. **United States Rubber, 1230 Avenue of the Americas, New York 20.**

For more details circle #76 on mailing card.

Wet-Dry Vacuum Cleaner Has Demountable Motor

A demountable motor that readily converts into a compact blower unit, a portable vacuum cleaner that straps on the operator's back, or a large capacity vacuum cleaner for use with a standard 55-gallon drum makes the new heavy duty

wet-dry Clarke vacuum cleaner a versatile unit. It is available with a choice of three interchangeable motor units that develop $\frac{1}{4}$, one and $\frac{1}{2}$ h.p. Also featured is an external filter and a 15-gallon heavy gauge stainless steel tank which mounts on either of the two carriage bases — a



wheel base with 10-inch rubber tired rear wheels, two casters and handle, or a caster base with four swivel casters. **Clarke Floor Machine Co., 30 E. Clay Ave., Muskegon, Mich.**

For more details circle #77 on mailing card.

Savings in Water Consumption With Easy Push Metering Shower

An adjustable metering valve with an integral volume control for regulating the water supply is a feature of Speakman's Easy Push self-closing metering shower. Up to two-thirds the amount of water

usually consumed in taking a shower is saved, resulting in considerable savings to schools and other institutions with multiple shower installations. When the Easy Push handle is pressed down, the shower gives up $4\frac{1}{2}$ g.p.m. of tempered water and shuts off automatically, so that water is not wasted while the user is soaping. The user presses the handle



when he is ready to rinse off and completes his shower. **Speakman Co., 30th & Spruce Sts., Wilmington, Del.**

For more details circle #78 on mailing card.

Six-Inch Belt Sander Can Be Used in Any Position

The new Duro six-inch Belt Sander, a three-in-one utility, can be used vertically, horizontally or at any position in between and handles wood, plastic or metal with equal ease and efficiency. Economically priced, the sander is constructed to permit opening of the hinged guard on the idler drum to expose a surface for sanding or deburring curved objects, and its features include sealed-for-life ball bearings; a pre-loaded belt tensioner that allows quick changing of belts; a simplified one knob tracking with a setting lock; heavy cast iron construction with substantial ribbing, and a spacious and sturdy vented cabinet base. **Duro Metal Products Co., 2651 N. Kildare Ave., Chicago 47.**

For more details circle #79 on mailing card.

Clean-O-Magic All-Purpose Cleaner in Pre-Measured Plastic Bag

One pre-measured plastic bag of Clean-O-Magic is dropped into a gallon of water to produce one gallon of liquid concen-



Spiral Type

SLIDE TO SAFETY . . .

In 63 actual fires, Potter Slide Fire Escapes evacuated everyone in plenty of time, without confusion or injury. Adaptable to all types of occupancy and for installation on the interior as well as the exterior.

Return the coupon below for information and a representative if desired.



Tubular Type

Tested and Listed as Standard by Underwriters' Laboratories, Inc.

POTTER FIRE ESCAPE COMPANY, CHICAGO 45, ILL.

- Mail copy of new catalog.
- Have fire escape engineer call with no obligation.

Submit estimate and details on escapes.

Signed _____

Address _____

City _____

trated cleaner with no dipping or measuring required. The concentrate is used to make from 30 to 40 gallons of cleaning solution with a high bactericide quality. No special mixing equipment is needed as all measurements have been pre-determined by the manufacturer and complete mixing instructions are printed on each carton. Storage requirements are at a minimum and supplies of the plastic packages can be kept in various areas throughout the school most convenient for maintenance crews. **Scaletty-Corydon Co., 2649 Lyndale Ave. S., Minneapolis 8, Minn.**

For more details circle #80 on mailing card.
(Continued on page 194)

THONET INDUSTRIES INC.
One Park Ave., New York 16, N.Y.

SHOWROOMS: New York,
Chicago, Detroit, Los Angeles,
San Francisco, Dallas, Miami,
Atlanta, Statesville, N.C.,
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THONET

SINCE 1830 MAKERS OF FURNITURE FOR PUBLIC USE

You Can Feed Up to 600 Children HOT & COLD Foods

Quickly, Easily,
Economically . . .

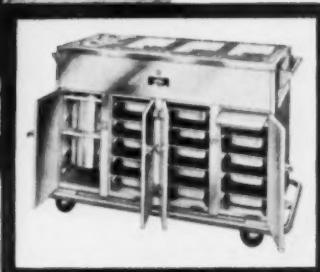
with the new
**Atlas HCP Portable
Electric Food Cart**

Serve hot foods **hot . . .** and
cold foods **cold!** Serve complete,
26-ounce meals.

The Atlas HCP Food Cart functions with maximum efficiency as a transporter of bulk hot and cold foods and as a serving top and reserve food supply in one unit. Now you can transport and serve hot and cold foods which will retain their original appetizing qualities, appealing freshness and nourishment over extended periods of time.

Special "cold-conditioned" compartment keeps cold foods COLD. Salads and desserts keep perfectly.

Thermostatic control insures that hot foods are kept HOT.



Please write for brochure containing complete information.



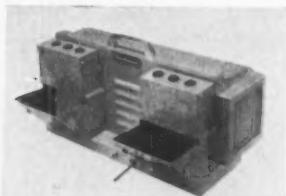
ATLAS DIVISION
NATIONAL CORNICE WORKS



Established 1911
1323 Channing Street,
Los Angeles 21, California

Selectronair Purifier Filters Irritants and Odors

An electronic device, powerful enough to strain even the smallest bacteria and other irritating particles from the air, is



available in the Selectronair. Odors are also dispersed immediately, making the unit effective for use in kitchens and

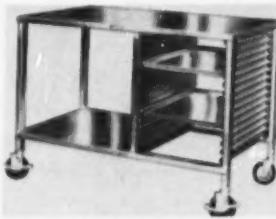
washrooms as well as in infirmaries and classrooms as an aid in helping to prevent cross infection. The permanent, washable filters effectively screen out particles and the germicidal ultraviolet lamps kill bacteria as the air passes over them. The lightweight Selectronair unit is carried by a chromium plated handle and is easily placed in a window and connected, ready for use. Selectronair, Inc., Shelton, Conn.

For more details circle #81 on mailing card.

Versatile Mobile Table Rack Has Variety of Uses

Undertable storage, auxiliary work surface, and transportation for large kettles and bulky supplies from one work station

to another are a few of the uses of the versatile Cres-Cor Mobile Table Rack, developed for use in kitchens or dining areas for the preparation and serving of food in institutions. Available in six standard models, the basic unit consists of a pass-through compartment enclosed on two sides with corrugated aluminum panels, and a second compartment with a removable bottom shelf that is open on three sides for easy access and handling of bulky items. The Table Rack is 34 inches high, and is offered with a choice of three different work surface

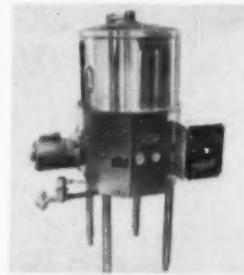


tops. Crescent Metal Products, Inc., 18901 St. Clair Ave., Cleveland 10, Ohio.

For more details circle #82 on mailing card.

Compact, Low Cost Dishwasher For Small Installations

A compact, low cost unit for small or medium sized installations, the Jackson Model 10 APR-B Automatic Dishwasher features Power Rinse to assure a safe rinse at all times, regardless of low or fluctuating water pressures. A built-in Booster Heater provides 180-degree final rinse temperatures without the need for an external heater. The 10 APR-B has all the advantages of larger dishwashers in



the line, and can wash 40 racks, 950 dishes or 1200 glasses per hour. Jackson Products Co., Industrial Park, Tampa 4, Fla.

For more details circle #83 on mailing card.

Zeal Combination Concentrate Is Safe For Hands

Formulated specifically for use in schools, hospitals and other public buildings, Zeal is a new combination cleaner-germicide-sanitizer-deodorizer for cleaning floors, walls and woodwork and for general cleaning. When used as recommended, the new product is harmless to skin and safe on paint and other surfaces. In a heavier dilution it may be used as a wax stripper. Requiring no rinsing, Zeal simultaneously accomplishes a cleaning, germicidal, sanitizing and deodorizing action, and cleans quickly and efficiently when diluted with any water. Turco Products, Inc., 24600 Main St., Wilmington, Calif.

For more details circle #84 on mailing card.

(Continued on page 196)

available in the Selectronair. Odors are also dispersed immediately, making the unit effective for use in kitchens and



... and healthful exercise for
your physical education classes



Nissen Trampoline® rebound tumbling equipment can be found in over 10,000 schools and colleges throughout the world.

We offer our experienced help in developing rebound tumbling as an integral part of your physical education program — Send for your free copy of, "What You Should Know About Rebound Tumbling."

NISSEN **TRAMPOLINE® COMPANY**
215 A Ave. N.W., Cedar Rapids, Iowa

Official NCAA and AAU Rebound Tumbling Equipment

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AUGUST 24, 1912, AS AMENDED BY THE
ACTS OF MARCH 3, 1933, JULY 2, 1946 AND
JUNE 11, 1950 (74 STAT. 208) SHOWING THE
OWNERSHIP, MANAGEMENT, AND CIRCUL-
LATION OF**

THE NATION'S SCHOOLS, published monthly at
Chicago, Illinois, for October 1, 1960.

1. The names and addresses of the publisher, editor, managing
editor, and business managers are:

Publisher: The Modern Hospital Publishing Co., Inc., 919 N.
Michigan Ave., Chicago 11, Illinois.

Editorial Director: Robert M. Cunningham Jr., 919 N. Michigan
Ave., Chicago 11, Illinois.

Managing Editor: Arthur H. Rice, 919 N. Michigan Ave.,
Chicago 11, Illinois.

Advertising Director: Joseph W. Cannon, Jr., 919 N. Michigan
Ave., Chicago 11, Illinois.

2. The owner is: (If owned by a corporation, its name and
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names and addresses of stockholders owning or holding 1 per-
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corporation, the names and addresses of the individual owners
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vidual member, must be given.)

The Modern Hospital Publishing Co., Inc., 919 North Michigan
Avenue, Chicago 11, Illinois.

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4. Paragraphs 2 and 3 include, in cases where the stockholder
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5. The average number of copies of each issue of this publica-
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ROBERT M. CUNNINGHAM, JR., Editorial Director;
Sworn to and subscribed before me this 28th day of Septem-
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FLORENCE HELSING, Notary Public.
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Modern as tomorrow!

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KRUEGER
All-New
FIBERGLASS
CHAIRS



No. 3201 ARM CHAIR
Black or Chrome steel legs



No. 3101 SIDE CHAIR
Black or Chrome steel legs

Curved and shaped to body contours,
Krueger's Fiberglass chairs help
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free from seat "bumps", because the
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Write for colorful new
descriptive brochure showing
actual Fiberglass colors.



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Literature and Services

- The electronic training equipment developed by Radio Corporation of America, Camden 2, N.J., is described in a new brochure entitled "RCA Electronic Trainer." Developed for teaching electronics through a combination of theory and practical experiments, the Instructor Demonstrator and Student Equipment are discussed and fully illustrated in the 12-page booklet.

For more details circle #85 on mailing card.

- Room groups of Encore modern metal furniture are shown in full color in the new Howell Catalog No. 30, as are photographs of actual installations. The 28-page booklet, available from Howell Co.,

Div. Acme Steel Co., St. Charles, Ill., includes full descriptive information on the attractive line of lounge, reception room and dining room furniture.

For more details circle #86 on mailing card.

- Samples of office forms, bulletins, letterheads, newsletters, a greeting card, tickets, systems paperwork and other representative material are included in a kit of 35 actual samples of materials run on the Model 320 Table-Top offset duplicator available from A. B. Dick Co., 5700 W. Touhy Ave., Chicago 48.

For more details circle #87 on mailing card.

- School-Quip Educator Designed School Furniture is the subject of a four-page illustrated folder listing chairs, desks and

combination units in the School-Quip line. Available from Yard-Man, Inc., School-Quip Div., 1410 W. Ganson St., Jackson, Mich., the leaflet includes a page of tables and specifications on the furniture.

For more details circle #88 on mailing card.

- Bulletin No. 6022 on the "Pac" Packaged Air Conditioner line includes product details and technical data and is available from Dunham-Bush, Inc., 179 South St., West Hartford 10, Conn. The new 12-page manual also contains a cutaway illustration and piping and wiring diagrams.

For more details circle #89 on mailing card.

- Catalog S-341 shows the six models of the Vapromatic moist heat food warmers and describes in detail the process by which temperatures are automatically maintained for individual foods. The six-page booklet, available from Bastian-Blessing Co., 4205 W. Peterson Ave., Chicago 46, includes charts and other information.

For more details circle #90 on mailing card.

- A 24-page manual that deals with TV systems for institutions, entitled "Designing and Installing Master TV Systems," is useful for the servicing and maintenance of the systems as well. Available from Blonder-Tongue Laboratories, Inc., 9 Alling St., Newark 2, N.J., the book contains charts, tables and a glossary of Master TV terms.

For more details circle #91 on mailing card.

- The CRS Remedial Reading Catalog, an annotated and graded list of books for kindergarten through sixth grade, and the 1960 CRS Record Catalog, an annotated list of phonograph records arranged by subject area and grade level, are two new 32-page booklets available from Children's Reading Service, 1078 St. John's Pl., Brooklyn 13, N.Y.

For more details circle #92 on mailing card.

- A new catalog of all the Materials by Judy is available from The Judy Co., 310 N. Second St., Minneapolis 1, Minn. It includes pictures and descriptive information on Puzzle Inlays, See-Quees, Story Sets, Master Word Sets, Music Flannel Board Kits, Leadership Seminar Kits and other visual manipulative aids for better teaching.

For more details circle #93 on mailing card.

- A section of new book reviews is included in the 64-page 1960 Catalogue of Fall Books for Boys and Girls available from Houghton Mifflin Co., 2 Park St., Boston 8, Mass. New additions to the publisher's North Star and Piper Book Series are mentioned, and the listings are divided into primary and middle grades and junior and senior high school fiction and non-fiction.

For more details circle #94 on mailing card.

- A 28-page booklet listing sources of free and inexpensive air/space age teaching aids, the third edition of "Pictures, Pamphlets, and Packets" includes more than 370 items such as booklets, travel posters, films and charts, and is available from National Aviation Education Council, 1025 Connecticut Ave., N.W., Washington 6, D.C.

For more details circle #95 on mailing card.

BETTER BECAUSE LUXOUT Draperies offer COMPLETE effective light control:

LUXOUT TRANSLUCENT draperies eliminate glare in offices, lounges, corridors and where audio-visual instruction is not given.

LUXOUT DIM-OUT draperies diffuse sunlight and darken rooms for projected pictures.

LUXOUT BLACK-OUT (opaque) draperies give absolute darkness when preferred for science rooms, auditoriums, or all-purpose rooms.

Widest selection of colors, patterns, materials!

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Free brochure, folders and color samples available upon request.

Plastic Products
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1822 East Franklin St.
Richmond 23, Virginia

- The new "LL Supplement," a four-page folder illustrating the many designs in lighting fixtures, lanterns and lamp standards available from Meierjohan-Wengler, 1100 W. Ninth St., Cincinnati 3, Ohio, displays a variety of contemporary and traditional models custom-fabricated in bronze, aluminum, stainless steel and wrought iron.

For more details circle #96 on mailing card.

- Air conditioning and air handling equipment, fluid drives, heat exchangers, surface condensers, steel boilers and related equipment are briefly described, and basic ratings given, in a new revised bulletin, B-5529, available from American Standard, Industrial Div., Detroit 32, Mich.

For more details circle #97 on mailing card.

- "Lupton Curtain Wall" is the title of a new 24-page catalog that completely illustrates and describes the Lupton line of architectural wall and features ten full color photographs of typical installations. Available from Michael Flynn Mfg. Co., 700 E. Godfrey Ave., Philadelphia 24, Pa., the booklet also discusses Comfort Conditioning curtain wall.

For more details circle #98 on mailing card.

- "How to Use Direct-Wire TV As a Low-Cost Educational Tool" is the title of a brochure offered by Argus Cameras, Inc., subsidiary of Sylvania Electric Products Inc., Ann Arbor, Mich. The educational uses of direct-wire TV include social studies, science, speech and drama, and language classes. In addition to advice on such subjects as team teaching, teacher training and non-academic uses for hall and yard monitoring, handling overflow audiences and the like, the booklet describes how a school can begin to use direct-wire TV with a minimum investment of \$595.

For more details circle #99 on mailing card.

- A four-page full-color folder, "You Get More Value With Superior," is available from Superior Coach Corp., Lima, Ohio, and includes an insert which discusses the painting, heating and defrosting, electrical features, driving vision, doors and windows, and seating and interiors of the Superior school bus.

For more details circle #100 on mailing card.

- Wassell "Work Organizers" are the subject of an informative booklet on Corres-Files, Rotor-Files and Rotor-File Desks manufactured by the Wassell Organization, Inc., Westport, Conn. The 32-page brochure presents the 1960-61 line of horizontal rotary files and rotary-file desks, five pages of office floor plans, and 14 pages of case history photographs and drawings.

For more details circle #101 on mailing card.

- A 36-page all-in-one source book of teaching aids and materials covers every major subject area in science and mathematics curricula and emphasizes low-cost items for student experimentation. Available from Science Materials Center, 59 Fourth Ave., New York 3, the 1960-61 Catalog also includes a supplementary reading list.

For more details circle #102 on mailing card.

- Helpful hints on choosing mobile folding units for school multi-purpose rooms are contained in a new 12-page illustrated Buyer's Guide to Mobile Bench and Table Units. The booklet, available from Howe Folding Furniture, Inc., 1 Park Ave., New York 36, lists factors to consider and questions to ask before buying, and includes a complete technical description of every unit it covers.

For more details circle #103 on mailing card.

- A 35mm filmstrip of color photos and drawings graphically depicting the characteristics most desirable in quality cooking utensils is offered as an educational aid in home economics by Aluminum Company of America, 702 Alcoa Bldg., Pittsburgh 19, Pa. The Cookware Film-

strip, entitled "A Thought or Two, About a Pot or Two," covers 10 to 15 minutes, at the discretion of the instructor, and provides a pictorial accompaniment to a script provided for the instructor.

For more details circle #104 on mailing card.

- Unit ventilator control systems for face and by-pass units are discussed in "Will Our School Provide the Climate for Learning?" (F-9787), one of two new informative pamphlets available from Barber-Colman Co., Automatic Controls Div., Rockford, Ill. The other, entitled "There's No Need for Sweaters" (F-9797), deals with valve-controlled unit ventilators using transistorized package controls.

For more details circle #105 on mailing card.

(Continued on page 198)

Here is a machine that is really ideal for every office. Quality built all the way through—with exclusive features you wouldn't dream of finding at such a low price. Turns out copies equal in every respect to those produced on expensive high-speed, heavy production duplicators. Handles all types of duplicating stock from post card size on up to 9½ x 15 (printing area: 8½ x 13½) including your office forms and direct mail. And—you can make fast color changes at no

additional cost. Amazingly simple to operate—and clean to use because it uses paste ink. Geha's sturdy construction means years of trouble-free performance. Fully guaranteed.

Free Demonstration Offer

Arrange now for a free demonstration of the Geha Comet in your own office without obligation. Pin this coupon to your letterhead and mail today.

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America's highest quality & most complete line of stencil duplicators & supplies

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- A summary of a study directed by Prof. Paul E. Mohn of the University of Buffalo entitled "Gas and Electric Heating in Two Schools at Angola, New York: School Year 1958-1959" is available from American Gas Assn., 420 Lexington Ave., New York 17, at 15 cents a copy.

For more details circle #106 on mailing card.

- Information on the 1961 Kodak High School Photo Awards is now available from Eastman Kodak Co., Kodak High School Photo Contest, Rochester 4, N.Y. A Fact Sheet telling who is eligible, the kind of pictures to be submitted, dates for entries, awards offered and giving other factual information is available for distribution to high school students.

For more details circle #107 on mailing card.

- Hundreds of key pieces of Cenco laboratory and classroom equipment for teaching a wide range of sciences are illustrated in the new Purchase Guide Order Book available from Central Scientific Co., 1700 Irving Park Rd., Chicago 13. Organized in alpha-numerical order, the 80-page brochure contains order blanks for the purchaser's convenience.

For more details circle #108 on mailing card.

- The 1960 edition of the 40-page manual, "How to Lay Out a Parking Lot," is available from Western Industries, Inc., 2742 W. 36th Pl., Chicago 32. Designed to help administrators and architects lay out parking lots that handle the maximum number of cars with the greatest efficiency, the new booklet includes a chart with the important dimensions of all makes of cars.

For more details circle #109 on mailing card.

- A 14-page brochure entitled "A Child's Life is in Your Hands" discusses the Wayne school bus, its construction and safety factors. Available from Divco-Wayne Corp., Wayne Works Div., Richmond, Ind., the colorful booklet includes photographs and drawings of the bus and its many special features.

For more details circle #110 on mailing card.

- Spectra-Glaze glazed structural masonry units are the subject of a new catalog available from Burns & Russell Co., Bayard & Severn Sts., Baltimore 30, Md. The 12-page illustrated booklet discusses the advantages of the product and presents specifications and a color chart.

For more details circle #111 on mailing card.

- Low-cost, license-exempt radionuclide kits for student use are listed in a new radiochemical catalog, Schedule F, as are over 400 radioisotope compounds, with prices and quantity discounts. Also described in the 20-page illustrated booklet, available from Nuclear-Chicago Corp., 333 E. Howard Ave., Des Plaines, Ill., are high intensity beta and gamma sources for thickness gauging, radiography and research projects.

For more details circle #112 on mailing card.

- A folder on the lightweight, low-price Speed-O-Print Photo Copier includes a colored illustration of the unit, describes the new developments incorporated into its design and is available from Speed-O-Print Corp., 1801 W. Larchmont Ave., Chicago 13.

For more details circle #113 on mailing card.

- The Actua Drivotrainer is the subject of a four-page illustrated brochure available from Rockwell Mfg. Co., Drivotrainer Div., 400 N. Lexington Ave., Pittsburgh 8, Pa., listing the components of the 15-place electro-mechanical device. It compares the teaching and operating costs of the unit with those of a dual control automobile and a combined course using both the Drivotrainer and the car.

For more details circle #114 on mailing card.

- A guide to the selection of automatic heating and cooling controls, the Engineer's Manual on Steam and Water Service presents typical examples and offers workable systems to solve certain control problems. Available from Powers Regulator Co., 3400 Oakton St., Skokie, Ill., the booklet includes a technical directory listing additional literature available.

For more details circle #115 on mailing card.

- USIC Incinerators are the subject of a four-page illustrated folder which describes and illustrates the line of double combustion chamber units with "grip lock" corners available from the manufacturer, United States Incinerator Corp., 755 Boylston St., Boston 16, Mass.

For more details circle #116 on mailing card.

- Descriptive information on "Leroy Lettering and Symbols" is provided in a 34-page booklet offered by Keuffel & Esser Co., Adams & Third Sts., Hoboken, N.J. Templates in the line are illustrated and all parts of the Scriber are pictured and explained.

For more details circle #117 on mailing card.

- Many proven ideas and techniques are summarized in a 60-page illustrated Manual of Paper Food Service designed to help the school lunch manager speed serving, assure sanitation, present foods attractively and make substantial savings in labor costs. Divided into 13 chapters, the magazine includes sections on Packaging with Paper, Freezing, Storage and Disposal, and Special Situations in School Lunch Programs, and is available at 25 cents a copy from Paper Cup & Container Institute, Inc., 250 Park Ave., New York 17.

For more details circle #118 on mailing card.

- "Move It With Pelto" is the title of a four-page folder on the handy Pelto P-250 multi-purpose lift truck which permits moving even the heaviest equipment easily and quickly. Available from D. L. Pezzuti, 320 Robble Ave., Endicott, N.Y., the folder describes the simple moving device and uses illustrations to show how a young woman can easily move a heavy piece of equipment with the truck.

For more details circle #119 on mailing card.

- Rugged steel buildings for housing buses, which can also serve as temporary classrooms, offices, storage spaces for athletic and maintenance equipment and for other purposes, are described in a leaflet entitled "Protect Your Equipment With Myers Bus-Housers." Illustrations show the strong, rugged, clear span buildings developed by Myers Bus-Houser Corp., Canfield, Ohio, and their various uses, and the leaflet gives details on the multi-purpose buildings.

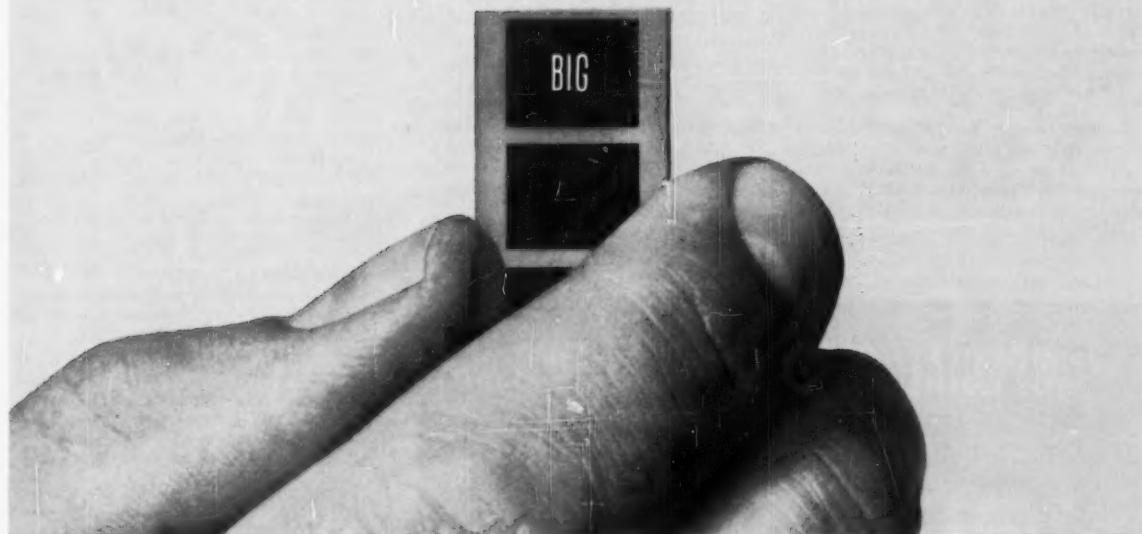
For more details circle #120 on mailing card.

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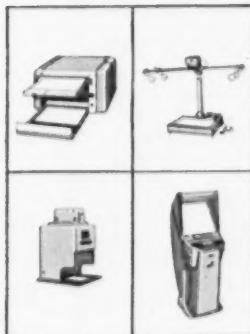
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• Standard Steel Permanent Grandstands are described in a new four-page color brochure that pictures various sizes of Standard installations. Diagrams and specifications are also included in the booklet, available from Standard Steel Bleacher Div., Three Rivers, Mich.

For more details circle #121 on mailing card.

• Safety and convenience features of the "Bally-Hi" Ladder and illustrations of the unit in use and collapsed to go through doorways are included on a new catalog page captioned "Cut Time — Increase Speed" available from Ballymore Co., West Chester, Pa.

For more details circle #122 on mailing card.

• Standard No. 5 relating to Commercial Hot Water Generating Equipment (Gas Fired and Electrically Heated) is now available from The National Sanitation Foundation, School of Public Health, University of Michigan, Ann Arbor, Mich. It is a scientific document and method for the design of a hot water heating system, or the selection of hot water generating equipment for commercial dishwashing. The new Standard is a fundamental and important adjunct to NSF Standard No. 3 relating to Commercial Spray-Type Dishwashing Machines.

For more details circle #123 on mailing card.

• A wide range line of air diffusion equipment is described in a new, comprehensive set of eight air distribution catalogs available from Anemostat Corp. of America, 10 E. 39th St., New York 16.

For more details circle #124 on mailing card.

• "A Teaching Guide for Slide Rule Instruction" is offered for free distribution to secondary and college level educators by Pickett & Eckel, Inc., 542 S. Dearborn St., Chicago 5. The book was prepared by Dr. Maurice L. Hartung, Professor of the Teaching of Mathematics, University of Chicago, as part of the company's Educational Aids Program, and is a complete classroom guide to basic slide rule instruction.

For more details circle #125 on mailing card.

• "Mathematical Models for Teaching" is the title of a 40-page catalog listing and illustrating the hundreds of three-dimensional transparent plastic models for teaching mathematics manufactured in Western Germany by Guenter Hermann. Available from Arthur S. LaPine & Co., 6001 S. Knox Ave., Chicago 29, the United States distributor, the booklet groups the models topically, including sections on Plane Geometry, Solid Geometry, Interpenetration of Solids and other subjects.

For more details circle #126 on mailing card.

• Cookson Wood Side-Coiling Partitions, designed to provide durable, compact, architecturally attractive separation of large areas such as gymnasiums, classrooms, cafeterias and multipurpose rooms are described and illustrated in Bulletin No. 6003. Available from Cookson Co., 1525 Cortland Ave., San Francisco 10, Calif., the four-page leaflet includes design details and specifications.

For more details circle #127 on mailing card.

• Two illustrated folders on stencil duplicators are available from Gestetner Corp., 216 Lake Ave., Yonkers, N.Y. The first leaflet concerns the new Model 360, **Designed for the Needs of a Space Age**, and the second the moderately priced Model 320, **Designed to Meet the Needs of Modern Business**.

For more details circle #128 on mailing card.

• Proper colors are recommended for walls, ceilings, floors, furniture, lockers, stair wells and corridors in a new booklet, "Tropical Paints for Schools and Colleges," which describes the psychological and functional values of using the right paint color for school rooms. Available from Tropical Paint Co., 1246 W. 70th St., Cleveland 2, Ohio, the 12-page pamphlet includes information on swimming pool and chemical resistant paints.

For more details circle #129 on mailing card.

Film Releases

"Universe," 16mm, 28-min. black and white sound film, combining animation, special effects and actual photography to present a scientifically accurate picture of the universe based on recent advances in astronomy. "Fifty Miles from Poona," 16mm and 35mm, 20-min. black and white sound film on the story of a Hindu family. "How Do You Drive?" 16mm, 26-min. black and white sound film for beginner and experienced drivers. **National Film Board of Canada, 680 Fifth Ave., New York 19.**

For more details circle #130 on mailing card.

"Science of Sound and Musical Tone," two new films on the exhibit of that name in the Museum of Science and Industry, Chicago, include an 18-frame color film-strip with 12-page Teachers' Manual and a 20-minute feature film in color and sound describing the exhibit in detail and approximating a visit to the museum. **Hammond Organ Co., 4200 W. Diversey Ave., Chicago 39.**

For more details circle #131 on mailing card.

"The World Within," 16mm, 27-min. sound color film offering an overall concept of parasitology and its relation to biology and medicine. "The Life and Death of a Cell," 16mm, 22-min. sound color film describing the concepts of modern cell theory as a visual aid in the field of cell physiology. **University of California, University Extension, Los Angeles 24, Calif.**

For more details circle #132 on mailing card.

Suppliers' News

Clarke Floor Machine Co., Muskegon, Mich., manufacturer of floor maintenance equipment, is now a division of **Studebaker-Packard Corporation**, according to announcement by Clarke President Ernest Cooper. The release states that there will be no changes in policies, management or field personnel, but the resources of Studebaker-Packard are expected to result in continuing and increasing expansion of manufacturing and service facilities.

International Film Bureau Inc., producer and distributor of 16mm teaching films, announces removal to new quarters at 332 S. Michigan Ave., Chicago 4.



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The NATION'S SCHOOLS

INDEX TO ADVERTISEMENTS

USE THIS PAGE TO REQUEST PRODUCT INFORMATION

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Products described in the "What's New" pages of this magazine also have key numbers which appear in each instance following the description of the item. For more information about these items, circle the appropriate numbers on the postcard and mail it, without postage, to The Nation's Schools.

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schools and industry*

LENNOX



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Lansing, Michigan

Architects: RALPH R. CALDER & ASSOCIATES
Detroit, Michigan

Tile Contractor: GRAND RAPIDS TILE & MOSAIC
Grand Rapids, Michigan

Photo No. 2045

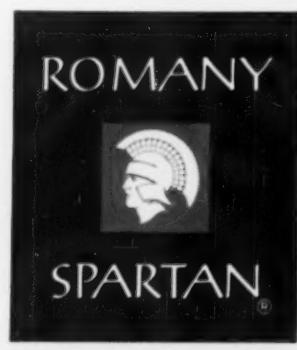
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Select Romany-Spartan ceramic tile for tank lining, runway and walls, and don't forget the shower and locker rooms, too.

The advantages are countless. Romany-Spartan is permanent—never needs replacement or repair. Because of its low absorption factor, it's impervious to body oils, requires less cleaning, holds maintenance to an absolute minimum. And its breathtaking beauty will never become soiled or dingy. Choose from an unlimited variety of sizes, shapes, colors and finishes, both glazed and unglazed to create the exact decorative effect you wish. Unglazed Romany-Spartan ceramic mosaics are available, too, with abrasives added for extra safety on normally slippery runways.

If there's a pool in your plans, consult your architect about Romany-Spartan. He'll be glad to provide samples and additional information. A free copy of "The Talents of Tile", showing school and college tile installations in full color, is yours for the asking. Write United States Ceramic Tile Co., Dept. NS-16, Canton 2, Ohio.

Description of tile: Tank lining, tank edging, lane and depth markers are unglazed Romany-Spartan Dresden ceramic mosaics, 1" x 1". Runway is the same with abrasives added for extra safety. Wainscot is of 4 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " Romany-Spartan glazed wall tile.



UNITED STATES CERAMIC TILE COMPANY

